A Foreshadowing of 21st century Art is the seventh in a series of books which describe an entirely new attitude to architecture and building. The books are intended to provide a complete working alternative to our present ideas about architecture, building, and planning — an alternative which will, we hope, gradually replace current ideas and practices.

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The photograph on 131 and 351, shows a painting by Christopher Alexander

Acknowledgements for other paintings: Page 6, The Black Door, Henri Matisse, 1942. Reproduced by permission, Private collection. Page 8, Paraki te Marae, The Sacred Mountain, Paul Gauguin, oil, 1892, present owner unknown. Page 9, Fishing Boats, Collioure, André Derain, oil on canvas, 15 1/8" x 18 1/4", The Museum of Modern Art, New York. The Philip L. Goodwin Collection. Page 10, The Beasts of the Sea, 1950, Henri Matisse. The National Gallery of Art, Washington, D.C. Page 11, Coupe et corbeille de fruits, Bowl and Basket of Fruit, Pierre Bonnard, 1944, Private collection. Page 12, Léda, Henri Matisse, 1944/1946, Private collection. The Gauguin text on page 18 is from Gauguin: The Quest for Paradise, by Franciose Cachin, and appears by permission of Harry N. Abrams, Inc., 1992, New York, all rights reserved.

A FORESHADOWING OF 21ST CENTURY ART

The color and geometry of very early Turkish carpets

by
Christopher Alexander

Including 90 color photographs of carpets in the Christopher Alexander collection, and 195 original sketches and drawings by the author

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For Pamela and Lily and Sophie
with hugs and kisses

I want to give my profound thanks to Marian Wattman Oshima, who spent thousands and thousands of hours helping me with the details that made it possible to write this book, and to Susan Edmiston who helped me with her excellent editing.

I should also like to thank the many dealers and fellow-collectors who have helped me to find the remarkable carpets which form the backbone of this book. With a few exceptions, these carpets were first found, before me, by Garry Muse, Bud Holland, Jean Lefevre, Alan Marcuson, Michael Franses, Johnny Eskenazi, Arky Robbins, Elio Cittone, Gil and Hilary Black, John Phillips, Ocsi Ullmann, Jim MacDonald, Franz Sailer, Dennis Dodds, Dani Ghigo, Penny Oakley, Tom Stauffer. If it were not for the efforts of dealers, combing the most obscure sources in the hope of finding one of these treasured carpets, all our efforts as collectors would be in vain. Because dealers work for money, it is often assumed that they can be forgotten in the ethical and art-historical scheme of things. But they, and their tireless energy, play an essential role in the network by which these carpets are found. Without them, the studies represented in this book would be impossible.

The same goes for the efforts of restorers. Many restorers have helped me. Standing head and shoulders among them, and now unfortunately retired, is Davina Waterhouse, whose eye and understanding are beyond compare in their contribution to the world of ancient carpets.

Several of the carpets shown in this book are the property of the Center for Environmental Structure. These carpets are illustrated by permission of the Directors of the Center for Environmental Structure. Photographs of carpets are by Don Tuttle, Garry Muse, Bud Holland, and Dennis Anderson. The photograph on page 349 is by Mark Darley.

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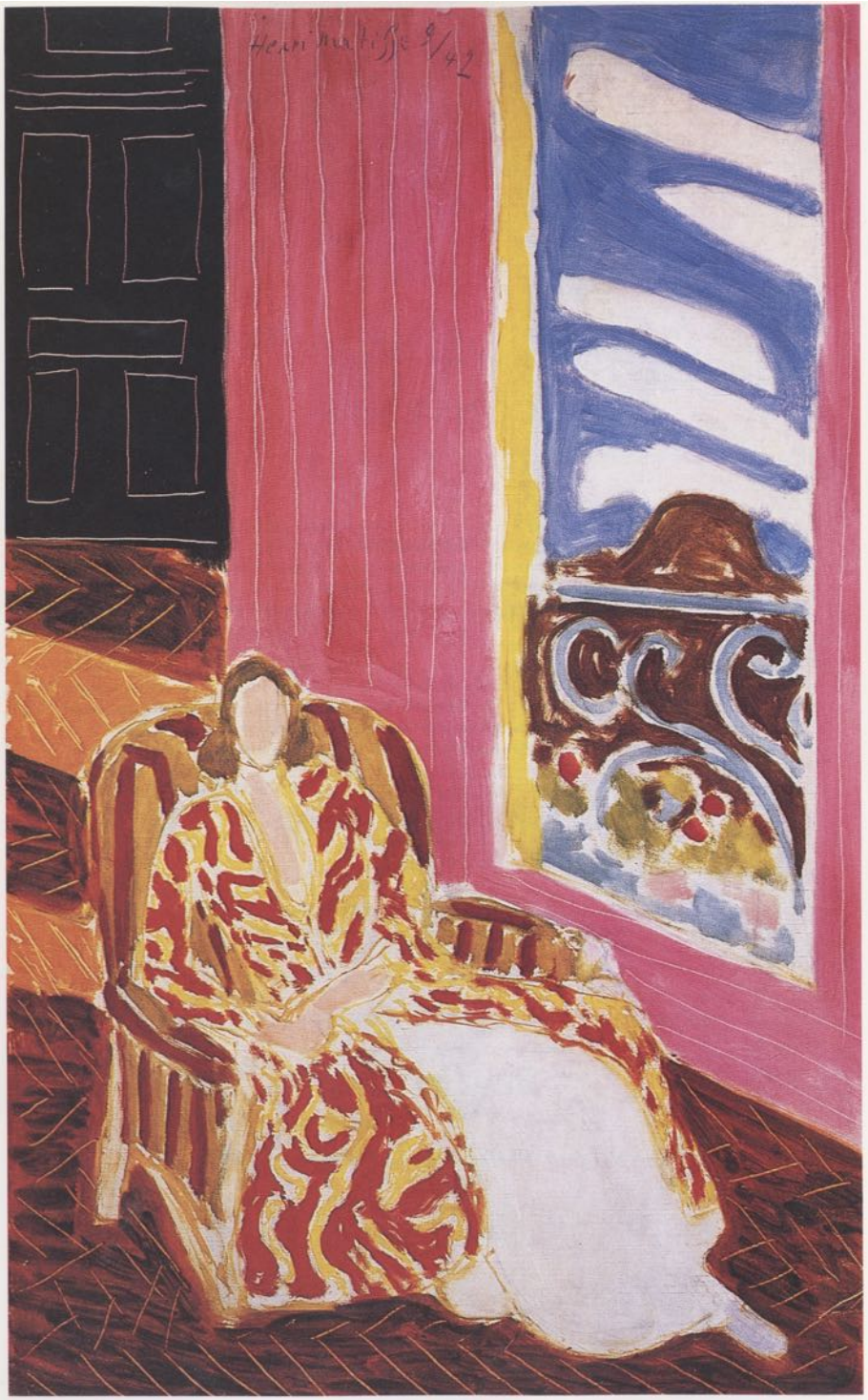


Henri Matisse, The Black Door, 1942

INTRODUCTION

THE ART OF BUILDING

Paired birds from the Pregnant bird fragment, 15th century

I am an architect. I have spent my life trying to find forms for buildings in which people may feel themselves at home.

As the main part of my work, I have found it necessary to go deeper and deeper into the actual making of buildings. Not just the obvious structural part, but the fine-tuned fabric of which the building is made up. Its members, floors, roofs, wall patterns, floor details — in sum, the way the building is made at the microscopic level.

As I have done this, I have become more and more aware that the beauty of the building does not only depend on the beauty of its site, its plan, its rooms — but on the fine structure: that it is the small stuff, the way the boards meet, the small carving on the head of a stair rail, the embossed pattern in a ceiling — which gives the building life or not.

What is often called the "detail" of the building — its fine structure — is not some kind of icing on the cake, but its fine structure, the essence of what it is, and how it makes its impact

Paul Gauguin, Parahi te Marae, The Sacred Mountain, 1892

upon us. The detailed pattern and ornament of which a building is made, is as much the essence of its structure, as the arrangement of sodium and chlorine atoms, is the essence of salt; or as the detailed arrangement of the amino acids is the essence of a human chromosome.

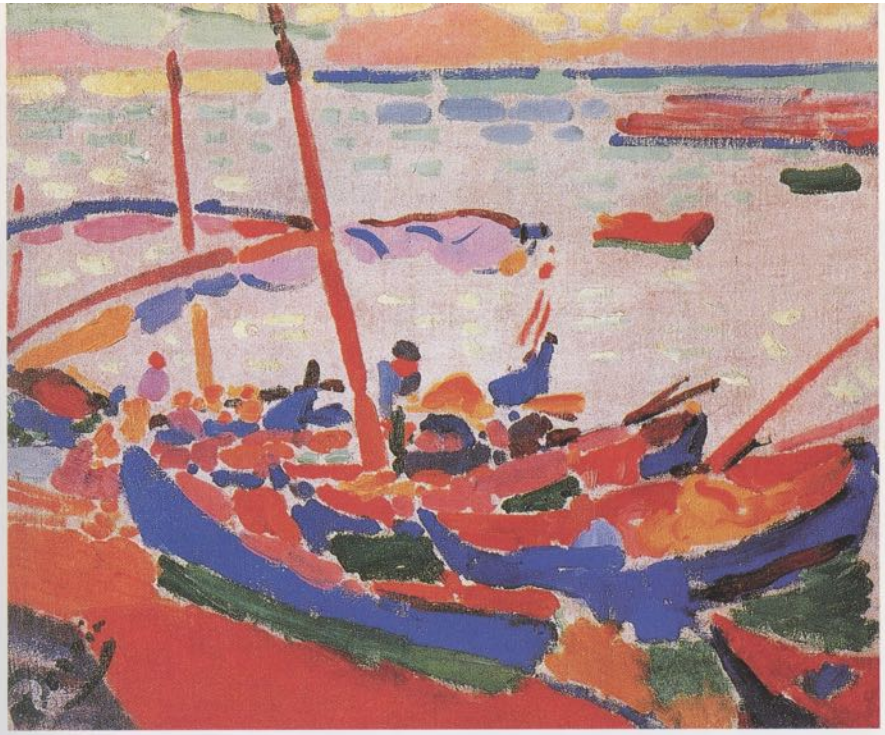
In short, the small structure, the detailed organization of matter — controls the macroscopic level at a way that architects have hardly dreamed of.[1]

But twentieth century art has been very bad at handling this level. We have become used to a "conceptual" approach to building, in which like cardboard, large superficial slabs of concrete, or glass, or painted sheetrock or plywood, create very abstract forms at the big level. But they have no soul, because they have no fine structure at all.

The actual organization of the fine structure is an enormous problem. We are just not used to ornament. Even Sullivan, or Wright, masters of ornament by 19th or 20th century standards — were children — novices — compared with the level of depth of understanding that has existed at different periods in human history.

Thus the idea that when we make the world, we are trying to produce this endless structure, in which tiny organization of color and form produces the structure of the world — is literally and physically embodied in a carpet. So the carpet itself, as an artifact, is a teacher too. In small, it is itself a teacher of the fact that the world itself is made of stuff, which must be beautifully organized, in detail, down to the smallest fraction of an inch — in order to make us feel at home. It is significant that the module of a carpet is as small as it is — about an eighth of an inch. And, as we

1 Almost the only writer I know who has so far written extensively about the connection between very small structure and large structure is the metallurgist Cyril Stanley Smith, *A Search for Structure: Selected Essays of Science, Art, and History*, Cambridge, Massachusetts, 1981.



Andre Derain, Fishing boats at Collioure, 1905

shall see throughout these pages, it is just the detailed organization which matters. So, one-eighth of an inch here or there, makes an enormous difference to the depth and subtlety of the macroscopic thing which is the carpet in the large. Thus the feeling of the thing which exists at the scale of several feet — the carpet itself — comparable in size to the wall of a room — is controlled in its working — its wholeness and its harmony — by decisions which exist at the scale of one-eighth of an inch. It means, directly, that if we hope to make buildings in which the rooms and building feel harmonious — we too, must make sure that the structure is correct, down to 1/8th of an inch. Any structure which is more gross, and which leaves this last eighth of an inch, rough, or uncalculated, or inharmonious — will inevitably be crude.

COLOR COMES FROM THE GEOMETRY

In a carpet, as in a building, the beauty of the organization ultimately finds its expression in the feeling and the color. The geometric microorganization which I have described leads directly to the glowing color which we find in carpets. It is this achievement of color which makes the carpet have the intense "being" character that leads us to the soul. It is this color which makes us feel our own life, when we confront the carpet.

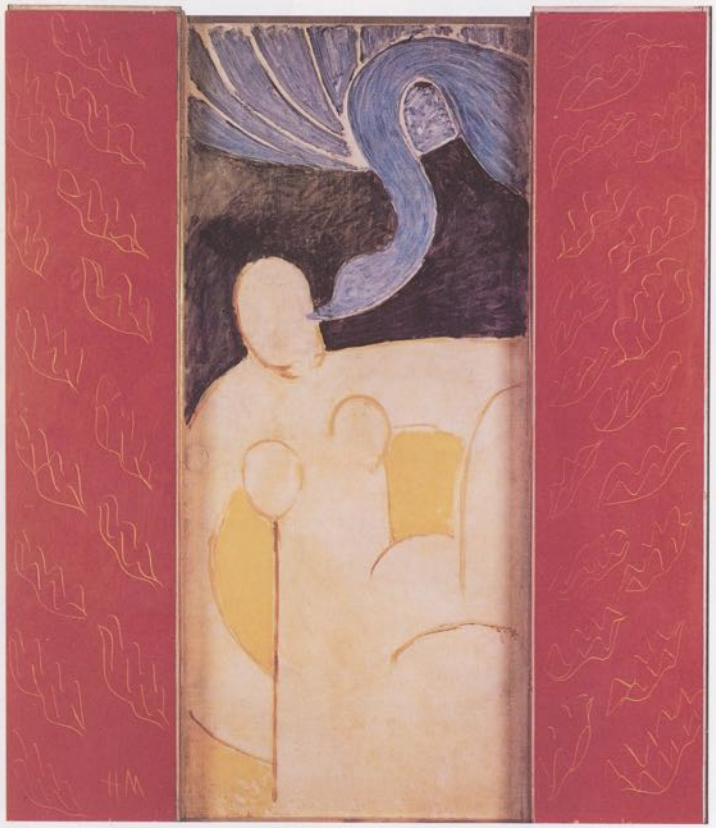
In the realm of color too, as in the realm of structure, we are just waking up again. In the late

Henri Matisse, The Beasts of the Sea, cut paper, 1950

Pierre Bonnard, Bowl and Basket of Fruit, 1944

19th and in the 20th century various painters have found some version of this wild color, in which we directly experience light. This work started in the 19th century, with Van Gogh and Gauguin. They began to produce color, as light, in which the pure geometry of the color, made the wild light.

In the early 20th century it began with Andre Derain. For a few years, around 1906, Derain painted some of the greatest color works that had been seen, by now approaching the color of the ancient carpets. Later in the 20th century Matisse made this intense attitude to color his own. By now recognized as the greatest painter of the 20th century, Matisse used geometry in the same way that it appears in the carpets, to produce spiritually blinding color. Again and again we see this quality in his paintings. Then still later, Bonnard, perhaps an even greater colorist than Matisse, and in my opinion ultimately the greatest colorist of the 20th century, made even more extraordinary paintings, in



Henri Matisse, Leda, 1944/6

which the color and its production of light, appear in a realm of pure abstraction.

But even these unbelievable colors, which appear in Bonnard's purest paintings, are often almost nothing compared with the color which was reached in the greatest early carpets. For example, on page 10 I show a lovely cut paper work by Matisse in green and white: *The Beasts of the Sea*. On page 13, using similar colors, is a part of the greater and more subtle work of the GREEN CARPET WITH WHITE BLOSSOMS.[2] On page 9 is a beautiful painting by Andre Derain, *Fishing Boats at Collioure*—one of the great works of the Fauves. On page 7 is the even more powerful and more intense interaction of yellow red and blue in a detail of the PREGNANT BIRD FRAGMENT.[3] On page 11 is one of Bonnard's most extraordinary works: the *Bowl and Basket of Fruit*. On page 14,

2 Full photograph and discussion on page 239.
3 Page 237.

Detail, Green carpet with white blossoms

Detail from the Flowered carpet with giant central medallion

more subtle, and more profound in color, is a part of the FLOWERED CARPET WITH GIANT CENTRAL MEDALLION.[4] The beasts, flowers, and interlace of this carpet produce color on a level which is more personal, more intense — it is a case where the way that geometrical organization gives rise to color, and through color then gives rise to a being, in a way that is even more extraordinary than in the works of the greatest painters.

THE CARPETS AS MY TEACHERS

My aim, my own hope as an artist, is to make works of this quality in the realm of building. It is this combination of microstructure and color — the overall creation of light, through geometric unity — which is the thing that I try to reach in buildings.

But, for reasons which are described fully in many of the other books of this series, especially in *The Nature of Order*,[5] this is immensely hard to do.

And, in the absence of a tradition in our time, there is no way to learn it from other people. With others like me, we are trying, effectively, to invent it for ourselves. But of course, learning a great art from scratch, by oneself, is almost impossible. To be an artist you need a teacher. And it is for this reason, above all, that I began collecting carpets. Many years ago, I began to realize that carpets had an immense lesson to teach me: that as organized examples of wholeness or oneness in space, they reach levels which are only very rarely reached in buildings. I realized, in short, that the makers of carpets knew something which, if I could master it, would teach me an enormous amount about my own art.

In a carpet, we have something which deals almost entirely with pattern, ornament. There is really nothing else: just the geometry and the color of the plane. As I began to enjoy carpets, I realized that the earliest carpets, especially, deal with this problem with enormous sophistication. The design of the carpet is essentially made of tiny knots — each knot usually about 1/8 of an inch by an 1/8th of an inch. Each knot is a separate bit of wool, and may be any color, without reference to the underlying warps and wefts. So it is a pure design, made of tiny elements, and in which the structure (the design structure, the pure organization of the geometrical arrangement) is the main thing which is going on.

I am not the first person to have noticed this. In the 19th century William Morris and his circle were fascinated by carpets, and were inspired by them in their craft. In the twentieth century a long succession of painters and artists have also struggled with the problem of pure arrangement of color and form.

But few of these artists have really dealt yet with the microstructure. The connection between small structure and big structure, hardly exists in their work. The inspiration for an architect, who realizes that the world is made of tiny elements, must be made of tiny elements — and that it is the geometry and organization at this tiniest scale — this problem, and its solution, has not existed in the work of these arts.

That is the problem of architecture to which I have addressed myself. And, in trying to understand it, in trying to find a teacher, I came to the very earliest Turkish carpets. It is in these carpets, that this problem is most profoundly dealt with. So I began trying to find those exam-

4 Full photograph and discussion on pages 230–231.

5 *The Nature of Order*, 1000 pages, in manuscript form, still unpublished, to be published by Oxford University Press.

Intense color in the Yellow and blue carpet with griffin and archaic border

ples of Turkish carpet art, which most profoundly address this problem. I assembled the collection described in this book, with the idea that these carpets may be kept, one day, in a museum, and will then be able to act as teachers, for a new generation of architects and builders and other craftsmen who are concerned with the physical making of our world.

FORMING OF THE COLLECTION

So here, in the following pages, are some of my beloved carpets. Many of them are unique, not belonging to standard types, but belonging rather to unknown groups. A few of them are probably among the earliest carpets still existing. These 74 carpets may be thought of as representatives of a kind of "core" of carpet art: the essential art of Central Anatolia. This core — also reflected in carpets now held in the Turk ve Islam and Vakiflar museums in Istanbul — represents the nearest thing we now possess to the artistic origins of the carpet art of the 16th to 19th centuries.

My awareness of this "core" of carpet art did not come about because of any pre-existing idea of the importance of Anatolian art, or because of any historical or geographical interest in the art of this particular area. It grew, by an empirical process of trial and error, simply focussed on the question: which carpets — among all carpets — are the most profound.

I started collecting carpets, years ago, because of my desire, as a builder, to learn from them. I felt that they had something to teach me: though I did not at first know what. Most of the carpets I started with are of course long gone from the collection. Like every carpet collector, I started with carpets that were not so good, and then gradually improved my eye, and improved the pieces in the collection.

While I was collecting them, over a period of many years, I looked at the carpets every day, and every day I learned something new from them. I still learn something every time I look at them. Some of the carpets in this collection, I must have looked at five hundred or a thousand times, and over the years I must have spent thousands of hours, simply looking, looking, looking.

I was never interested in the classification of carpets. I did not care if the carpets came from a certain area, or from a certain type, or from a certain period. I was only interested in those pieces which had the most to teach me, in my own work as an artist. Gradually, as a result of this intention, I found myself searching for earlier and earlier carpets. This also did not happen because I had any kind of intellectual idea that early carpets were better. It happened simply because I discovered slowly, through experience, that the earlier carpets had a deeper structure, were more beautiful, and had far more of that complex and important structure, from which there was so much to learn. So, gradually, I tended more and more towards the very early carpets, in my search.

Among the early carpets, I found myself with a marked tendency to choose Turkish ones. Even in those cases where I did buy carpets from other parts of the world, they were always those which had a pronounced "Turkic" character. So although there are Spanish carpets, Persian carpets, Caucasian carpets, Central Asian and European pieces in the collection, I have nevertheless always focussed on the Turkish carpets. Once again, this did not happen because of any preconception about Turkish carpets. For some reason which I cannot entirely explain, it seemed that the Turkish carpets had the most of that oneness, or spiritual depth which I was looking

for — it simply occurred more often, and more deeply, in Turkish carpets than in any others.

Finally, among the Turkish carpets, I found in myself a strong desire to look for the great village pieces from the early centuries. These early village carpets — unlike the classical Ushaks — are the real core of authentic Turkish carpet production. Pieces of this kind, from the 14th, 15th, 16th and 17th centuries are rare outside the Turk ve Islam and Vakiflar Museums in Istanbul, and largely unknown to many people. Nevertheless, it is these kinds of carpets which, in my opinion, embody the core of Turkish carpet weaving.

It is my belief, that the beauty, or oneness, which we find in these particular Turkish carpets — and in those other early carpets which I loosely think of as "Turkic" — has never been surpassed in the history of carpet weaving, and represents the pinnacle of what can be done.

What did their makers put into them? What aspects of form, organization, color, and geometry, is it that these carpets have, that lets them reach this pinnacle. What is it about their structure that places them, among all carpets, at the same level that Bach or Mozart occupy in the realm of music.

After years of looking, looking, as well as making things myself, I think I finally have a partial answer to this question. To a first approximation, I believe I can describe the structure which makes these carpets work. That is what I shall try to do in this book — to be clear enough about the structure which they have, so that we, as artists, in the 20th and 21st centuries, may have some hope of making things of equal beauty.

I know that this idea, this hope, may seem fantastic, even absurdly pretentious to some people. That, I fear, is only the mark of our age, where people — and architects in particular — have almost given up the effort to make things of great beauty, because the knowledge of what it means, and the hope of being able to do it, seem so utterly remote.

But in any case, it is my hope that what I have to say about these carpets, and about the extraordinary structure they possess, may not only shed new light on the art of carpet weaving for scholars and collectors, but may inspire other builders and other artists to regain their confidence — so that they can make things of equal spirit and of equal beauty.

> *I still have to discuss color solely from the standpoint of art. Color alone, as a language of the listening eye, and its power to suggest. . . .*
>
> *Oriental and Persians, among others, printed above all a complete dictionary of this language of the listening eye; they endowed their carpets with marvelous eloquence. You painters who clamor for a color technique! Study those carpets, and they will tell you all you want to know; but who can tell, the book might be sealed and you won't be able to read it. Then the memory of bad traditions gets in your way.*
>
> *From this kind of color — definite in its inherent charm, yet indefinite as an indicator of objects perceived in nature — there arises a disconcerting question, "What can that possibly mean" that defies analysis. What does it matter?*
>
> — *Gauguin*, Diverses Choses

PART ONE

THE BEAUTY OF EARLY TURKISH CARPETS

Early carpet with spotted lobes

CHAPTER 1

THE ORIGINAL CREATURE

A carpet is a picture of God. That is the essential fact, fundamental to the people who produced the carpets, and fundamental to any proper understanding of these carpets.

This does not mean, in anglo-western terms, that a carpet is a picture of a man with a long white beard. God, the all seeing, everlasting stuff, is the target of Sufism — as it is of all the mystical religions. In modern language we might also call it ultimate oneness of everything. The Sufis, who wove most of these carpets, tried to reach union with God. And, in doing it, in contemplating this God, the carpet actually tries, itself, to be a picture of the all seeing everlasting stuff. We may also call it the infinite domain or pearl-stuff.

Because of this, each carpet tries to show a pattern which is the infinite domain. In addition, since we must see through to this infinite domain through some window — the carpet also has a border. And of course, since this window, like the universe itself, is also made of the same stuff, the border too is a fragment of this everlasting infinite domain. Thus every carpet is, in essence, a window made of infinite pearl-stuff, which looks through towards another fragment of the infinite pearl-stuff, which is captured and framed in the window.[1]

All this is surely true of those carpets which were woven in the Sufi tradition. The idea of a carpet as a picture of God is an Islamic conception, a conception created by the mystical branch of Islam. And the carpets in this book do all fall within the Islamic period. None of them were made before 600 AD.

However, there are reasons for thinking that the tradition of carpet structure, goes back much further. Recent discoveries have found a line of artistic tradition which goes back to prehistoric Central Anatolia — that is to a people who were already fixed and culturally settled in Central Anatolia as long ago as 5000 BC — long before Islam was even thought of.[2] These people too, were making a picture of God. In the prehistoric tradition, this picture was more directly animal — a conception of things in which the carpet was a picture of the animal essence — the being nature which exists in things, and throughout our mentality.

In carpets made by the Sufis, the animal feeling exists side by side with the picture of God. On the one hand the carpet is a picture of God. On the other hand the carpet is an animal presence which tries to create an animistic being. But from an emotional and artistic point of view these two ideas are almost the same. Certainly they are interwoven. Great beauty can be achieved properly in any given carpet, only in so far as these two things exist together, and reflect each other, in the actual substance of the carpet.

My main task in this first part of the book is to sketch out the way this substance, this animal-

1 A full description of this idea is contained in my much longer book, not yet published, *The Nature of Order*, currently in manuscript at the Center for Environmental Structure, Berkeley, and to be published later by Oxford University Press.

2 James Mellaart, Udo Hirsch and Belkis Balpinar, *The Goddess from Anatolia*, West Germany, 1989; Cathryn M. Cootner and Garry Muse, *Anatolian Kilims: The Caroline and H. McCoy Jones Collection*, San Francisco and London, 1990; and Jack Cassin, *Image Idol Symbol: Ancient Anatolian Kelims*, Vol. 1, New York, 1989.

God "stuff" is produced by color and geometry—and how a carpet, when it has great power, achieves its dreadful essence through these things. Like all carpet collectors, when I started I thought carpets were beautiful. But in the years since then, and as I have been finding older and older carpets, I have gradually become convinced that the real importance of these carpets lies much deeper. I have become convinced that a carpet, when it is a good one, reverberates with some kind of primitive and archetypal force, that it has in it some kind of being, that it connects with some primitive, almost animistic "soul of the world"—and that the carpet must be judged, in the end, according to the degree to which it does, or it does not, make a connection with this force.

In this sense, it is in its power, very much like the great bronze castings of the Chinese Shang dynasty, which establish an almost magic force, by establishing themselves as beings, in some realm, which connects us to itself, to which we are connected, which is an absolute realm of beings, and whose functioning is almost entirely animal-like, spirit-like, not matter-like, almost conscious—it is as if the thing, the bronze, or the carpet, establishes itself in my own belly, as a voice, speaks with my own voice, exists with my own force, and forces my awareness of an ultimate mother, or an ultimate creature of which I am a part—and which exists in me.

This nearly animistic view of carpets is consistent with the recent discoveries, already mentioned, that have centered around the tradition of prehistoric art in Central Anatolia. The essence of the view which lies behind these discoveries, is that what we naively call beauty, and what we experience as artistic force, lies in the creation of an object which speaks directly with my own inner voice, that there is, at the heart of all things, a single voice of universal blackness and thickness and light, that speaks in all tongues, and that holds all force into itself.

A carpet, when it holds the almost magical force which all carpet lovers recognize, holds this force, because, to some degree, it embodies this original voice, lets us see this original animal force that exists in ourselves. I believe the same is true, of every artefact. As a builder, I am trying, every time I make a building, to reach a connection with this force, and to make a thing, which fills us, with this animal and animistic force. The force, though primitive, and almost alien, is that underbelly of ourselves, which makes us human. Though unrecognizable, and almost taboo, because it is by turns violent, lustful, peaceful and absurd, is nevertheless that thing which, to the degree it comes to life in us, makes us live innocently as people in the world.

CHAPTER 2

COLOR AND LIGHT

The animal being of the carpet hinges on color. A principal idea of this book, is that the quality of wholeness and force in a given carpet, is associated with a kind of light, produced through color. This light, or color, is the way the wholeness comes to life. It is the way we experience the wholeness, through feeling. And it is, most of all, the thing about the carpet which holds us, communicates its depth, and touches us. As we shall see, this light is not only highly

religious in feeling, the "light of the soul." It is this which becomes barbaric, animal-like, and is experienced almost as a creature.

And the essence of all great ancient carpets *is* their color. The great old carpets are to the world of color, what the prehistoric Chinese bronzes are to the world of sculpture. They represent the most profound, most fierce intensity

Intense light in Red carpet with tree of life and animals

of color. They represent that realm, where "the original creature" has been most ferociously produced in the world of color, perhaps the most intense color that has ever been produced in human artifacts.

The intensity of color and the creature-like feeling of color comes about, because of the way the colors are organized in the geometry. Thus, it is the geometry which is the main study of this book, because it is, above all, the geometry which *produces* such intensity of color. Nevertheless, it is the colors themselves which are the focus, and it is through color, and through the light which color makes, that a carpet reaches its capacity to be a picture of God.

Before starting on a detailed description of the way that color works, or before showing the intensity of color the carpets actually produce, I should like to mention a few key points, which set the stage for a discussion.

It must be understood, first, that it is the oldest carpets which have the most beautiful and most brilliant colors. Although there are rare examples, where because of age, the colors are faded, most often it is the oldest carpets which have the greatest brilliance and intensity. This happens, quite simply, because it is in the oldest carpets, that their makers *cared* most about color. They took care that the colors were so well-dyed and fixed, that the colors have lasted for hundreds of years.

And they chose the colors with such care, that the brilliant light which the colors create, shines out even when the carpet is worn or damaged in its wool.

It should be understood, secondly, that the concern for color was of such paramount importance, that the master dyer was, at least the equal, as a craftsman, to the master weaver. In the great period of carpet weaving, the apprenticeship of a dyer lasted fifteen years. At the end of this fifteen years, the apprentice dyer was required to make a color which no one had ever seen before. Only then would he, or she, be recognized as a master dyer.

This period of training is about twice the seven years which we have today for a top theoretical physicist, or for a brain surgeon. This gives some idea of the relative importance which the craft of dyeing had, as viewed in ancient Anatolian society. Simply stated the dyer — the person responsible for the color in a carpet — was considered so important, and the subtlety of the art considered to be so great, that the training of a master dyer was equivalent to the seven years of training for a 20th century theoretical physicist, *followed consecutively* by the full seven years of training for a 20th century brain surgeon. This is almost unimaginable in our society today. It gives us a direct and concrete estimation of the way these people saw color, and how important they thought it was.[3]

In order to understand how this color comes about, it must be understood, next, that the color — the field-like intensity and brilliance which makes the color of a carpet reflect the soul, comes about essentially because of its geometric organization. This very long topic is too complex to discuss fully here. It is dealt with at length in a forthcoming book.[4]

However, we can understand it partially, by looking at the two examples I have printed with this chapter. The first example, on page 23, is a detail from the RED CARPET WITH TREE OF LIFE AND ANIMALS.[5] The dye of this carpet is unbelievably intense, so here, again, we have the dyers art very much in evidence. But of course the brilliance of color comes from the proportion of colors, their juxtaposition, and the geometry of their arrangement. It is the small yellow lines lying on this deep red, the presence of strange hues of orange, blue, deep and highly saturated,

3 The information about a 15 year dyer's apprenticeship appeared in a small book written by a villager from a carpet weaving area. I saw the book many years ago, and made a note of this important fact, but can no longer find the book to give the reference.
4 *The Nature of Order*, chapter on "Color and Inner Light."
5 Page 142.

Detail. Very early small pattern Holbein carpet

almost blackish green — which makes the light shine out so intensely from the carpet. If the organization were more floral, less geometric, and had less of the geometric structure that is described in the following chapters, the wonderful colored light just would not be there to the same degree.

The second example is also an early carpet — the VERY EARLY SMALL PATTERN HOLBEIN.[6] Here the whites, pale blues, soft fuller yellows and pale reds on a darker ground work together to create an overall brilliance almost "like heaven." Again we notice that this particular Turkish carpet is highly geometric. It is the geometry, the interlock of the shapes, the very striking boldness of the geometric shapes, and the way that figure and ground reverse, and the many, many levels of scale, which brings this softly shining color to fruition. But the exactness and highly geometrical character of the shapes work together to produce a softly shining light, not something harsh or "strong." What is accomplished is soft and shining light.

In everything that follows, we shall see again and again how the geometry of space which unifies the carpet, is done, essentially, in the great carpets in order to bring this shining light into existence.

CHAPTER 3

OBJECTIVE WHOLENESS: THE MIRROR OF THE SELF

Both the animal-being which comes to life in a carpet, and the inner light of its color, depend directly on the extent to which the carpet achieves wholeness in its geometry. The great carpets — the ones which are most valuable, most profound — are, quite simply, the carpets which achieve the greatest degree of this wholeness within themselves.

It is, of course, essential for this thesis that the quality of wholeness not merely be a matter of preference or taste for different observers, but instead a definite, tangible, and objective quality, which really does exist to a greater or lesser degree in any given carpet.

The quality of wholeness in a given carpet, depends on the structure of a centers within the carpet. Just what these entities called "centers" are, I shall begin to explain in chapter 4. For the moment, I simply wish to say that the structure of centers which appears in a given carpet, seems to hold the key to the degree of wholeness which appears in the carpet. The wholeness is achieved, to the extent that the structure of centers is complex and profound. This is something which we can observe, discuss, and study with a reasonable amount of objectivity. Thus, the concept of wholeness can be identified in a reasonably objective fashion.

6 Page 177.

Let me say, in addition, that this wholeness, which may exist in a given carpet to a greater or lesser degree, is not different from the value, or beauty, which we all see intuitively in carpets — and which, indeed, makes the basis for our interest in carpets, in looking at them, studying them, collecting them.

However, the fact that each person's intuitive sense of beauty, has its origin, in perception of this wholeness, does not mean that all observers see this wholeness to the same degree. As all carpet collectors know, there is growth in any person who spends a long time looking at carpets. The carpets we like when we first begin collecting or admiring them, are, very often those with rich colors, pretty colors, joyful design. But as the years go by, one's taste changes. In most cases it moves gradually away from the superficially pretty, towards something else which, in one way or another, seems more profound. This phenomenon is caused by the fact that wholeness, though objective, is not easy to see. It takes experience, often also human maturity, to see wholeness in its deepest forms.

When we begin looking at carpets, we look with the eyes of children, and are dazzled by phenomena, which are only distantly related to the degree of wholeness which actually lies in the carpet. Then, as we see more and more carpets, we slowly become aware that some carpets have more "staying power" than others. Their value is more lasting, more permanent.

Gradually we gain enough experience to pay attention more and more to this permanent quality in carpets, and to pay less and less attention to the idiosyncratic and subjective preferences which guide us at first. Thus, slowly, we exchange our subjective preferences, which are indeed different in each person, for something more lasting, and deeper, which is less subjective, and which is understood more or less clearly by all those people who have the greatest experience and most serious attitude in looking at carpets.

The more we reach this stage, the more we are learning to see wholeness itself, unmarred by personal tastes and preferences. This process may take ten, fifteen, twenty years. Thus wholeness is a phenomenon which is often hard to see.

This difficulty still does not mean that it is not objective. In other realms of human experience, qualitative phenomena are also hard to see. We do not therefore reach the conclusion that they are not objective. When we acknowledge that it takes a great amount of experience for a geologist to glimpse the possibility of oil being present in a certain rock formation, we certainly agree that not everyone has the necessary experience to be able to see it. But we are nevertheless quite clear about the fact that the perception is in principle real and objective when it occurs. The rock does or does not contain oil. We do not assume that just because it is hard to see, it is therefore a matter of taste, or merely a subjective preference.

The perception of wholeness in carpets is similar. It takes experience to see it. People who are looking at carpets for the first time, will not, generally be able to see it very accurately. Even people who have been looking at carpets for several years, will often not yet see it clearly. It is, nonetheless, an objective quality, which exists in the carpets to a definite degree.[7]

To study wholeness, we must have an empirical way of distinguishing it from preference. Of course, different carpet-lovers have different preferences. If we go by preference, one person will prefer Turkoman carpets, another wooly Kazaks, another short-piled Caucasian carpets, long carpets, prayer rugs, carpets with yellow in them — and so on. These kinds of idiosyncratic preferences tell us nothing about wholeness.

7 This is the main theme of *The Nature of Order*, and is discussed continuously through that book.

The Berlin prayer rug

Well-known Kazak from Tschebull collection

Thus, if we place a particular Lotto carpet side-by-side with a particular Kazak, and ask people to tell us which of the two has more wholeness, it is likely that we shall find some people choosing the Lotto, and some people choosing the Kazak simply according to their tastes. This is not necessarily because there is disagreement in their perception of the real quality of wholeness. It happens because they are not asking themselves about the wholeness, but about their preferences. They are asking themselves which one they like better, not which one is most whole. There is no doubt that a person's individual taste can dominate his judgement of wholeness, and will then overshadow any accurate perception he may have, about the relative wholeness of the two carpets.

In order to see through the overlay of preferences which inevitably exists in each of us, we must construct a question which is so concrete, that it shocks the system, and forces a direct, more true, and more accurate response, because it makes no room for overlays of preference. In the last few years, I have experimented with many questions of this kind, and have found one, which serves this purpose rather well. The question asks: "If you had to choose one of these two carpets, as a picture of your own self, then which one of the two carpets would you choose?"[8]

This sounds like a peculiar question. It seems unusually personal. At first hearing it also sounds remote from the task at hand, which is to determine relative wholeness or "oneness." Indeed, it sounds at first, as though this question, and its answers, must inevitably have an entirely personal and subjective outcome.

What is remarkable is that this is not the case! When two carpets are laid side by side, and people ask themselves this question, there are high levels of agreement, in their answers. The question somehow has the ability to move a person away from his own preferences, and towards the issue of real wholeness.

This happens essentially because the question focusses awareness on the real oneness of the person, and compares it with the oneness of the carpet. The carpet with the greater oneness seems more like "me" because I am comparing it against my own oneness. As a result, this seemingly idiosyncratic question, has the power to help us see the underlying being in every carpet, and to judge the extent and measure of its presence.

In order to get a preliminary feeling for the question, and the results it produces, consider the examples on the previous page. One is the famous Berlin prayer rug.[9] The other is a Kazak from the Tschebull collection.[10] Look at these two photographs, and ask yourself which of the two you would more readily accept, as a picture of yourself.

In case you find it hard to ask the question, let me clarify by asking you to choose the one *which seems better able to represent your whole being, the essence of yourself, good and bad, all that is human in you.*

I believe few people who ask themselves this question, phrased like this, will choose the Kazak.

Of course, the example is rather loaded. The Berlin carpet is one of the most famous carpets in the world. Few people who have seen it before can look at it with fresh eyes, and it may therefore seem impossible for this example to be unbiased. Let us therefore repeat the experiment with a less well-known pair.

I ask you to compare the two carpets from my collection shown below, both previously unpublished. Once again, I should like the reader to try and decide, which of these two carpets he would more easily choose as a picture of his "self." To compare them properly you must look at the full color pictures[11] — not only at the black and white photographs on this page. I believe that almost everyone, after careful thought, will choose the

Flowered carpet with giant central medallion

The Waving border carpet

8 The question is extensively discussed in the *Nature of Order*, chapter on "The Mirror of the Self."

9 Wilhelm von Bode and Ernst Kuhnel, *Antique Rugs From the Near East*, London, 1970, Pl. 2.
10 Raoul Tschebull, *Kazak*, New York, 1971, Pl. 18, p. 55.
11 On pages 231 and 193.

left-hand example. Even though the two are of roughly equal importance, and of comparable age, I believe most people will conclude that the left-hand one is more profound: that one feels more calm looking at it; that one could look at it, day after day, for more years, that it fills one more successfully, with a calm and peaceful feeling. All this is what I mean by saying that, objectively, the left-hand carpet is the greater — and the more whole, of the two.

My main contention, through this book, is that this feeling of greater depth, is an objective judgement — not a subjective preference — and that it arises because indeed, the left-hand carpet has a deeper and more significant structure: and that, also, as a result of this greater depth of structure, the light which it produces is also more profound, and closer in its nature to the nature of the human soul.

Garry Muse has constructed a similar, though different question, in his recent book on Anatolian kilims.[12] He asks, essentially, which of the kilims is the more original, the more ancient image, the closer to the original inception, closer to the "beginning." What is interesting about his essay is that, unlike those writers who are looking for a literal historical connection to neolithic art, he recognizes that this deep quality is in the thing itself — in the drawing of the kilim itself — and that its quality of being "original" is not a historical quality but an absolute one, which can be recognized even by someone who has no direct knowledge of the ancient forms which possibly preceded it. It is, in other words, a measure of potency, which asks how deeply the drawing of a particular kilim is ancient, powerful, real, tied back to the essence, not open to interpretation, but everlasting and kept alive so that it can go on forever. Though not exactly the same, this is very close to the question I am asking.

A more informal way of talking about it, is simply to ask which of the two has greater staying power. If you have to look at the thing, over and over and over again, which one stays the longer. Can I look at it every day, for ten years, and still find something in it. Does one last longer than the other. The one which has the greatest depth, or the greatest wholeness, is the one which has the ability to last longer — gives us a mirror, for contemplation, which serves us, and nourishes us, for longer. The greatest works, are those which we can come to again and again and again, every day, for fifty years, and still find nourishment.

In my life as a collector, I have sometimes infuriated dealers, who have usually been very kind and patient with me, because it sometimes takes weeks, even months, of looking at a carpet again and again and again, hanging on the wall in front of you, to decide whether or not it has this quality, or to what extent it has it.

But it can be decided. That is the essential fact. And it is this fact which puts the wholeness of a carpet, or of a portion of a carpet, on an objective footing, independent of taste or preference. It is this, of course, which then opens the door to the possibility of trying to understand the real structure which underlies the wholeness.

It is certain, in my mind, that the weavers of these carpets, especially during the great period from the 12th century to the 16th century, *were explicitly aware of this quality, and explicitly and consciously sought it.* In fact, I am almost certain that this was the main purpose of their art: to create this profound religious wholeness in the carpets they were weaving, to the greatest degree possible. The quality which, in my effort to be scientifically neutral I call wholeness, was seen by *them* as the One, or God, or unification with the great Self. For them, the task of making the One in a carpet, was the same as the task by which they tried to reach wholeness with God, both in their own lives, and in the thing they made.

12 Garry Muse, "Discovering the Art of Anatolian Kilims" in Muse and Cootner, *Anatolian Kilims*, pp. 81-87.

CHAPTER 4

THE BUILDING BLOCKS OF WHOLENESS

To approach the phenomenon of wholeness in a carpet, I begin with a kind of miniature version of wholeness — the building blocks from which wholeness is made.

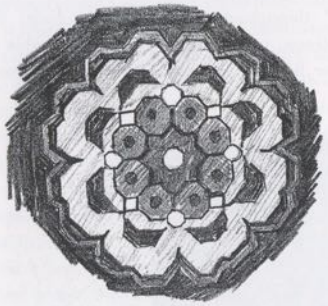
These building blocks — which I call "centers" throughout this book — are nuclei of wholeness, in miniature, which occur within a larger field of wholeness. They are local con-

A key center in the Endless knot design Hispano Moresque carpet

figurations, which appear whole in the design. They are themselves microcosms of wholeness.

As we shall see, each center is made from other centers. Thus, once we understand the way in which a center — a local piece of wholeness is formed — we shall then see that the larger wholeness of larger and larger areas, is made up from these smaller centers — themselves aggregated, to form larger centers.

Thus, the wholeness, that we see in miniature, in a center, becomes both the model, and



First example: round blossom from the Blossom fragment

the building block, from which larger and larger blocks of wholeness are made.

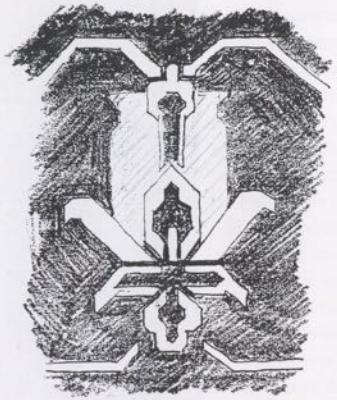
As I have already said, it is my opinion that the structure of centers which appears in a carpet, gives us the closest understanding of its degree of wholeness — and inversely, it is also true that we shall learn to see wholeness, to the extent that we understand this concept of a center, and are able to apply it to our seeing.

Most of the chapters in this essay, will deal with the ways in which centers and wholeness are interrelated, and in which structures of multiple centers actually *produce* wholeness. It is therefore necessary, from the beginning, to have a clear idea of just what a "center" is. As we shall see, the concept of a center, like the concept of wholeness, is hard to grasp, and, to a lesser extent, also hard to see. Once again, it is a concept which requires understanding and experience.

However, it is necessary to begin with a simple view. In this chapter I shall try to give an elementary account of the concept of a center.

As a first approximation, a "center" may be defined as a psychological entity which is perceived as a whole, and which creates the feeling of a center, in the visual field. Here are some examples:

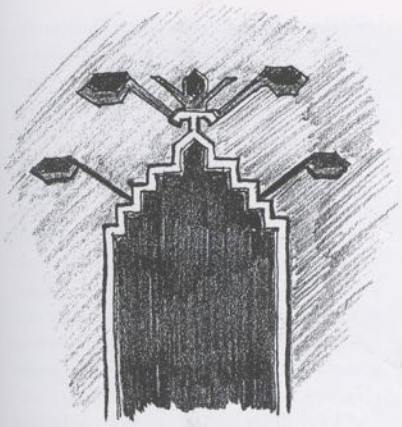
The blossom of the BLOSSOM FRAGMENT[13] is a very obvious example. Here we have an eight-lobed blossom, containing either smaller rosettes, with four diamonds, and four small white circles, forming highlights, eight leaves, in pairs, visible within the blossom, and an outline, repeating the eight-lobed design, defining the outer boundary of the blossom, and a small white dot in the middle.



Shaped blossom from the same Blossom fragment

It is quite obvious that this figure forms a "center." It is not merely a whole which has a physical center, at its middle, but it projects a feeling of centrality, it appears, in the visual field as a point of origin, a focus, a center of the visual field.

13 Not shown in part three.



Second example: niche of the Coupled column prayer rug

We may notice that this center, is itself composed of many smaller centers — which, in a minor way function in the same fashion that the larger center does. Thus, the small white dots, which ring the middle, are each centers of some sort; the black dots in the middle of the eight smaller blossoms, are once again centers; and, in a more subtle sense, even the asymmetrical black leaves which ring these smaller blossoms are centers of some kind; and the points of indentation, where the boundary of the large figure presses in towards the middle, these sharp points are also centers — that is, they appear, once again, as centers of the visual field.

As we shall see later, the fact that the first and largest center is itself composed of smaller centers, is no accident at all. Indeed, we shall find out, in a later and deeper analysis of the concept, that the most powerful centers are always made up of other centers — and that indeed, paradoxically, a center must ultimately be defined, as a field of other centers. However, we are not yet ready to come to that. First, we must explore the psychological phenomenon itself, more thoroughly.

14 Page 241.

The first example which I have given, happens to have a pronounced eightfold symmetry, and might therefore be seen by some as a "mandala." We must therefore immediately distinguish the concept of a center, from the concept of a mandala. A figure which is able to produce the sensation of a center in the visual field, is by no means typically mandala-like. Very often it is entirely different in character.

As a second example, let us consider the arch-like figure which occurs in the early COUPLED COLUMN PRAYER RUG WITH EIGHT COLUMNS of the collection.[14] As before, the figure is perceived as a whole, and creates the sensation of a powerful center in the visual field. And as before, we may notice that this figure by no means

Third example: arrow head from Byzantine-Timurid prototype

gets its feeling of being a center, merely from its shape. The shape by itself, does relatively little. What makes it a center, is the system of other centers, which this shape contains. For example, the small hexagon-shaped arch at the middle, the individual steps along the sides, the

arms, and hexagons at the ends of the arms, and the lily shape which stands at the top.

As a third example, let us consider the arrowhead lotus figure which occurs in the BYZANTINE-TIMURID PROTOTYPE.[15] This figure is of course, not mandala-like at all. It is, however, undeniably, a center, in the same sense as before. That is, the figure is perceived as a whole, and creates the sensation of a powerful center in the visual field.

As before, we may notice that this figure, by no means gets its feeling of being a center, merely from its shape. The shape by itself does relatively little. What makes it a center, is the system of other centers, which this shape induces and contains. For example, the diamond that

The star without its context

forms the head, the diagonal bars on either side, surrounded by the hooks which project in from the lower side, the hook itself, the tail of the hook, the parallelograms on either side of the head, the tiny triangles in front of the head, the diamond which forms the "tail," in diamond array. It is interesting to note, that these tiny triangles are placed, as precisely as possible, to enhance the "centeredness" of the area in front of the head — as a result the triangles do not line up vertically with the hooks of the lotus itself. Thus it is not the formal arrangement of the design which governs — but instead, the capacity that each element has, to create a center as strongly as possible.

It is also interesting to see that in the carpet design itself, these figures are presented in an array, and interlock in such a fashion that each one helps to strengthen the center which is created by each of the others. Thus, in this example, each center, does not exist alone in the visual field — it is a phenomenon produced by the *whole* field. This is an essential point, which we must study in more detail.

For a fourth example we look at a center which clearly derives its function as a center, from the organization of the entire visual field. Consider the STAR CARPET WITH FLOWERS, a carpet which has a central medallion.[16] To understand more about the nature of a center, we may make a simple visual experiment. Let us look at the star octagon at the center of the central medallion, with and without its context.

We shall see that the context, the field of material which surrounds the star, very much strengthens the feeling of centeredness which the star has. The star itself becomes stronger, when we see it in the context of its white medal-

Star in partial context of white lozenge

lion. And in addition, this white medallion itself is also stronger, as a center, when we see it in the context of the two white half medallions at the ends of the field, and the four dark half medallions at the edges of the field. In the context of these other half medallions, the white medallion shines out far more strongly as the center of all, than it can do by itself.

15 Page 133.
16 Page 213.

Star carpet with flowers, showing full context of the star

The effect seems to radiate inward, even into the inside of the medallion, so that the inner feeling of the thing, itself, appears to be strengthened by the presence of these other elements in the field around it.

We see then, that a configuration which forms a "center" is not defined *locally*, only by the configuration itself, but by its place *in the whole visual field*, and by the way in which the various elements in the field cooperate to produce

a feeling of intensity and centrality at some particular point.

One further point must be made completely clear. In defining a center, we are always talking about *a* center, not about *the* center. The fourth example which I have just given, happens to describe a center which occurs literally in the middle of the carpet—at *the* center. But the concept of a center is completely general. The first example I gave, was of a blossom which occurs repeatedly throughout the field of the carpet where it occurred; the third example, the lotus arrowhead, is repeated 20 times even in the small fragment of the BYZANTINE-TIMURID PROTOTYPE which still exists.[17] In general the concept of a center, is a phenomenon which can, and does, occur anywhere in the visual field of a carpet; and the whole point of the concept, is that when we learn to understand it thoroughly, *we shall begin to see that every carpet contains hundreds, in many cases even thousands of centers, strewn, packed, and interlocked, throughout its structure*. It is this structure of many centers which we shall study; and it is in this concept of a multiplicity of overlapping centers, that the power of the concept lies.

It is important, in summary, to re-emphasize the relation which exists between the concept of a center and the concept of wholeness. As we have seen, a center, is a small, or local phenomenon, which embodies, or creates wholeness locally. A center is thus, a kind of miniature version of wholeness, within a locally defined area. A center is a structure which possesses wholeness "in the small."

It is therefore very reasonable to expect that we may be able to understand wholeness in the large, in terms of the centers which exist within a given carpet, in the small.

The centers which occur in a carpet are, if we like, the building blocks from which its larger wholeness is made. Since a center is, itself, defined by its own local wholeness, it does indeed seem very probable that the larger wholeness of an entire carpet, might be understood in some way as a product of the smaller wholenesses contained in individual centers, acting together.

CHAPTER 5

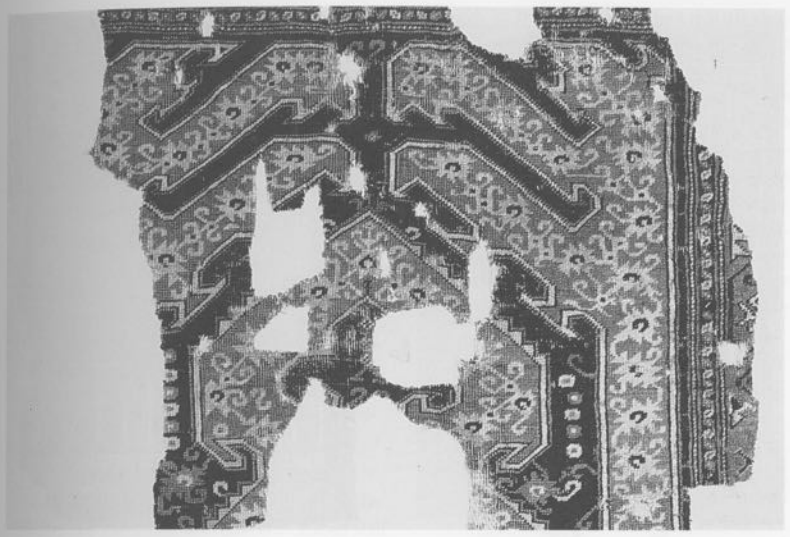
THE MULTIPLICITY OF CENTERS

In chapter 4 I have given an elementary definition of a center, as a local entity, within a carpet, which appears as a perceived whole.

Now I may state the connection between the centers in a carpet and the degree of wholeness which that carpet achieves: *The degree of wholeness which a carpet achieves is directly correlated to the number of centers which it contains. The more centers it has in it, the more powerful and deep its degree of wholeness.*

We have already had a glimpse of this idea, because even in the description of individual centers which I gave in chapter 4, we saw that the powerful centers are *themselves* made up of many smaller centers. It is only a short jump from this idea to the idea that the most powerful

17 Page 133.

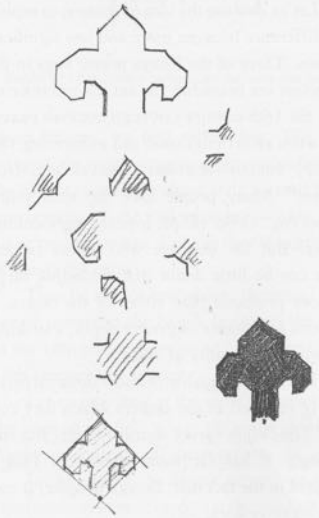


Archaic arrowhead blossom carpet

centers, are the ones which contain the most centers in themselves.

For example, if we consider the great arrowhead figure in the ARCHAIC ARROWHEAD BLOSSOM CARPET[18], we see that the power of the figure is created by the fact that the arrowhead itself is made of several smaller centers, each one also powerful, and contributing to the power of the arrowhead.

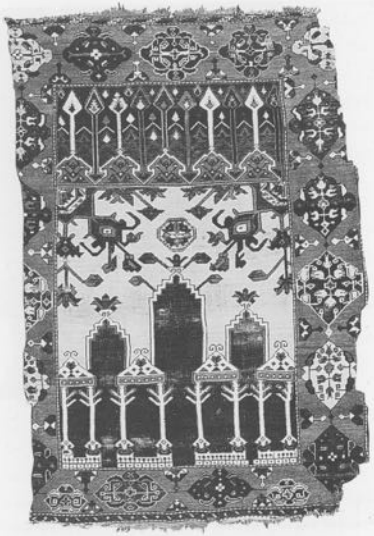
Let us now extend the idea. We shall see that the carpet as a whole—even though fragmentary now—contains an unbelievable wealth of centers—and that it is the multiplicity of these centers, which make the carpet powerful and profound *as a whole*. For example, it is the large parrots with the space between the beaks, the feet of these parrots, the small crab-like red and yellow ornaments in the field, the space between these ornaments entirely made of tiny triangles. It is this multiplicity of centers which makes the carpet dazzle, which lets us look at it for hours.



How the arrowhead is made of centers

18 Page 191.

Seljuk prayer carpet, Konya, 13-14th century

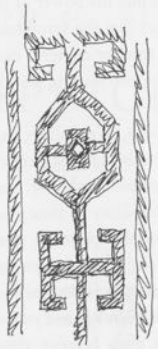


Konya coupled column prayer rug, 16th century

Let us now use the idea of centers, to explore the difference between more and less significant carpets. Three of the Konya prayer rugs in this collection are beautiful: the SELJUK PRAYER CARPET, the 16th century COUPLED COLUMN PRAYER RUG WITH EIGHT COLUMNS, and a charming 18th century YELLOW BORDERED PRAYER RUG from Konya.[19] Many people love the little yellow prayer rug. Other people love the eight-column carpet. But for someone who knows carpets, there can be little doubt that the Seljuk carpet is more profound than either of the others. It presents a substance of greater depth, a striking, unforgettable quality of being.

The relative quality of these three carpets is clearly reflected in the centers which they contain. The Seljuk carpet seems simpler. But surprisingly it has far more structure. This is reflected in the fact that, though simpler, it contains more centers.

Let us start by comparing the three main borders. The Seljuk one is very simple. But if we look at it carefully, every single portion of space is calculated to be a center in its own right.



13-14th century border: every part of space is a center

The centers: each block represents one center

19 Pages 127 and 241. The latter is not illustrated in part 3.

Yellow bordered prayer rug, Konya, 18th century

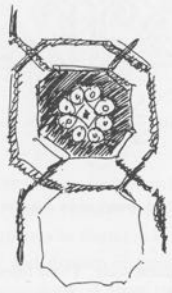
Even the most insignificant bits and pieces between the elements, are carefully shaped and proportioned rectangles which function as centers. In the small drawing on the right of the main sketch, I show each of these centers as a rectangle with a cross.

The beautiful cartouche of the 16th century carpet already shows some degeneracy. The tulip heads are centers, the space between the heads are centers, there is a cross at the mid-point of the design, the side portions of the cartouche are two black hexagons also functioning as centers. There is a small dot-like center outside the cartouche, on axis, helping

16th century border: already fewer centers

to form it. But at the same time that all these elements function as centers, there is also a great deal of space which is now amorphous. The white things alongside the two hexagons are on the verge of becoming shapeless. Much of the space between the designs is not composed of centers. Even the space inside the tulip head, is amorphous and not center like.

The border motif of the 18th century carpet, has a theoretical complexity — in the overlapping octagon lines forming hexagons — and the rosette in the middle. But when we actually



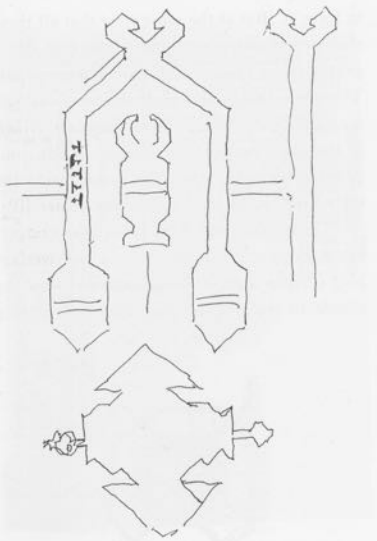
Border of 18th century carpet: cute but very few centers

count centers, we find rather few. The outer octagon, the inner octagon, eight circles forming the rosette, and the hexagon strip formed by the overlapping of the two octagons — only about 10 or twelve centers. Far less than the cartouche of the 16th century.

Thus by simple arithmetic, the actual number of centers in the Seljuk border is the most, in the 16th century cartouche is next, and in the 18th century one is least.

Let us now look at the same arithmetic, for the zone of the field where the niche is formed. Again we compare all three carpets.

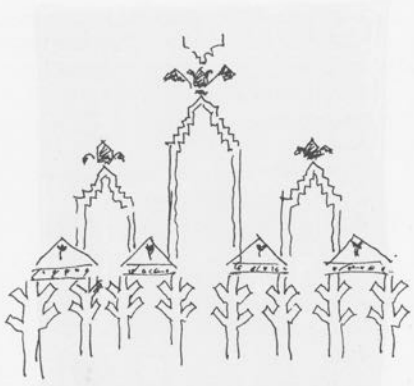
In the case of the Seljuk carpet, we have a continuous system of centers at the smallest scale, formed by the fact that the actual line of the niche outline, is made of alternating interlocking T-shapes — already forming dozens of centers,



Centers in 13-14th century niche: hundreds, densely packed

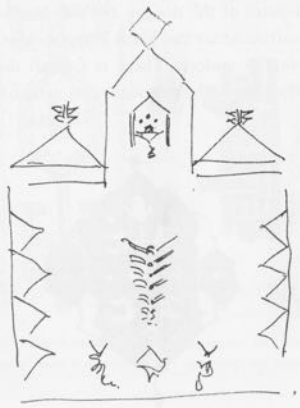
even at the tiniest scale. These lines are gathered together to form the Y-shapes at the top of the niche and side-arms. The line breaks into hexagon shaped lamp-like figures, both within the upper niche, and in the side arms; the forms in the space, created between the lamps and side arms, are themselves composed of simple triangles and lamp shapes. And below the niche, forming at extension of the niche, is the wonderful medallion, also formed of lamp shapes, slightly different, and Y-shapes, like those at the top, but larger now. The reflections and echoes of one shape in another create further invisible centers, by making invisible cross-link lines, that connect similar but not identical components to one another.

In the 16th century COUPLED COLUMN PRAYER CARPET, we find a number of centers which is at first sight even greater. It is very busy. Stepped sides to niches, triangular and keyhole shapes between the columns formed by the fish tails on the columns, lilies and arrowheads at the



Centers in the 16th century niche: many scattered ones

tops of the niches and so on. However, the apparent profusion of centers does not continue when we look carefully at the space between the niches, or at the space between the columns. The space is tightly knit, but nowhere near as tightly knit as the space in the Seljuk niche. Again this is reflected in the fact that if we actually look line by line, and count the centers, the Seljuk one, though seeming simpler, actually has more centers — even in its simplicity.



Centers in the 18th century niche: nice, but very few

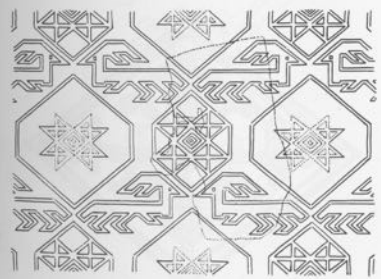
Finally the eighteenth century niche, has a few centers which give it life and charm — but count by count, the number is far, far smaller.

Thus again the Seljuk has the most, the 16th century next most, and the 18th century carpet the least.

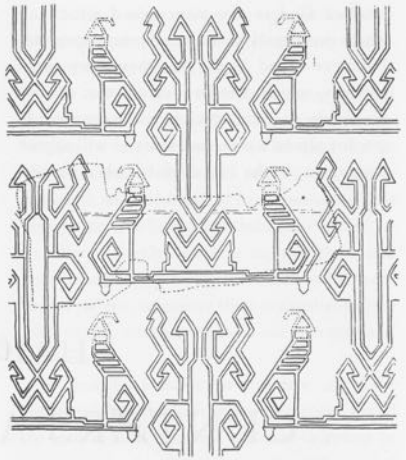
This simple numerical observation correlates perfectly, with the fact, fairly obvious, that the 13-14th century version has the greatest emotional and artistic power of the three, and that the 18th century Konya version has the least. If we ask ourselves intuitively what we feel about these three different versions, I think there is no doubt that we find the first one magnetic, powerful — we find the eight-column version beautiful but less profound, and we find the small 18th century carpet delightful, but also the most trivial of the three.

The dazzling display of levels in the Seljuk carpet — although simple and almost severe — is equalled in very few carpets, including even large carpets like Northwest Persian medallion carpets which evidently have an immense array of structure. The discipline, simplicity, and enormous complexity of space that is achieved in this small carpet, is absolutely fascinating. And it is all the more fascinating, because at first sight the carpet is so simple.

It will help to put the idea of the multiplicity of centers in perspective, if I mention here



One of Lamm's reconstructions, densely packed with centers



Another of Lamm's reconstructions, also packed with centers

the fact that the very earliest carpet patterns — for example those reconstructed by Lamm, from the fragments he found in Fostat — show us a packing and density of centers which is absolutely astonishing. I show two of his reconstructions here.[20] These patterns are unbelievably dense with centers. The centers not only occur at many levels — but they are packed, unbelievably, so there is no distinction between figure and ground at all — only a seemingly endless swimming interlock of figures. This is not a historical accident of style. It is a great achievement for the artist, and it is immensely hard to do. We must therefore acknowledge that the weavers who wove these fragments were better artists than the weavers of 18th century Kazaks. The patterns which have this property of dense multiplicity of centers, are — just because of that — great works, and it is in their existence that we recognize the greatness of this early carpet art. The density of centers in these examples, is the mark of great art — a substance, almost certain to

20 C.J. Lamm, *Carpet Fragments*, Stockholm, 1985.

produce God in the plane — and something which we ourselves must one day aspire to. I believe — and hope, that these very great patterns, which contain such extreme density of substance — and which have not appeared in art, for almost a thousand years — will appear once again, in the 21st century, when we succeed in mastering these concepts once again.

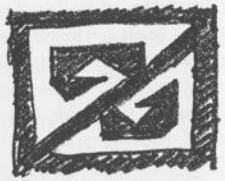
Thus the idea of the centers suddenly begins to show its potential. From being a simple-minded, and slightly obvious way of looking at different carpet patterns, we now find that it is correlated, in an essential fashion, with the profoundness of the design.

CHAPTER 6

CENTERS AND LOCAL SYMMETRIES

To explain the idea of centers more thoroughly, and to see how the relationship between centers and wholeness occurs, I shall now start a series of chapters in which I shall explore different aspects of the concept "a center." As we shall see, this idea, which seems relatively simple so long as we view it in a naive way, turns out to be highly complex, and enormously subtle in the multiplicity of further ideas, aspects, and developments, which it contains.

I begin with one of the most fundamental aspects of a center: its symmetry. In the examples of the last two chapters, almost all the examples of centers which we have discussed, are locally symmetrical. There is a profound connection between the idea of a center, and the idea of symmetry. Although not quite all centers are themselves symmetrical, every center is *either*



Border motif from Carpet with purple and white octagon

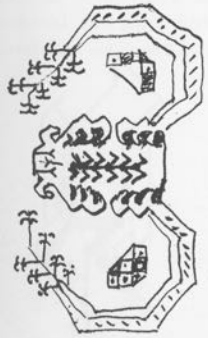
Field design from Green field "Mongolian" carpet

Figure from 15th century Small pattern Holbein carpet

symmetrical *or* itself made up of other centers which are symmetrical.

We shall now explore this fact in detail. There are three points to be made:

1. Most centers are symmetrical. This means they have at least one bilateral symmetry.



Field design from Ram's horn carpet, made up of centers

2. Even when centers are *asymmetrical*, they are always composed of smaller elements or centers which *are* symmetrical.

3. All centers are made of many internal local symmetries, which produce smaller centers within the larger center (most of them not on the main axis of the larger center), and *have a very high internal density of local symmetries*. It is this property which gives them their power.

Very roughly, we may say that there is a local center, in a carpet, or other two dimensional pattern, whenever there is a spatially compact chunk, which appears in our perception as a "whole."

Thus, for instance, in this sense, all of the following motifs which appear in carpets, would be seen as local "wholes" and may therefore be understood approximately as local "centers." These four examples come from the CARPET WITH PURPLE AND WHITE OCTAGON,[21] from the GREEN FIELD "MONGOLIAN" VILLAGE CARPET,[22]

Tulip from 17th century Ladik prayer rug

21 Page 311.
22 Page 323.

from the SMALL PATTERN HOLBEIN CARPET,[23] and from a LADIK PRAYER RUG.[24]

In each case it is obvious that we are looking at a local whole. In three of the four cases there is an obvious local symmetry holding the motif together; in the fourth case, the square made of two split triangles with S-forms, the symmetry which holds it together is not axial, but rotational. One half can be superimposed upon the other by spinning it about the center. Even in this fourth case, again the whole thing is made of two equal halves.

Now of course, the coherence of these four motifs comes from something more than mere symmetry. This is especially obvious in the case of the small Holbein motif, which has within its modest area almost as much complexity, as entire carpets of later periods do. And of course, this greater coherence, and complexity, is itself caused, by further, smaller, internal symmetries — once again obvious in the case of the Holbein motif.

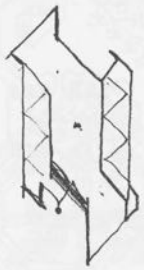
Detail from White field bird carpet

But, in any case, if we just examine the largest "level" of the four motifs themselves, it is evident that each one manages to create a local whole, and that this is achieved at least partly by its internal symmetry; and that the local whole strongly projects, or creates, a field which defines a local *center*.

23 Page 221.
24 Not shown in part 3.

So far all three examples of centers have been rather severely geometric — even though the first example, a blossom, could be interpreted as a flower. Also, all three of these example are symmetrical. It is true that all centers are in some sense geometric; and it is also true that very many of them are symmetrical. However there are also many cases where a center is realistic — not geometrical — or where a center is strongly asymmetric. In order to make this clear, I shall now give a sequence of three examples: First, a flower, which is rather realistic; second, a geometric ornament which is strongly asymmetrical; and third, a flower, very realistically drawn, and itself quite asymmetric.

1. First, there are obviously cases where the symmetry is very intact. But this seems to have little effect on the wholeness, or centeredness of what we see. For instance, in the case of the square made of two triangle with S motifs — the two triangles are actually quite dissimilar, if we examine them very closely. However, the fact that each is a triangle, and that each of these triangles has a rough hook motif, seems to be enough. It is therefore clear



Field element from Green carpet with leaves

Field motif from a White field Ladik prayer rug

that the local symmetries do not need to be *exact* in order to work.

2. Second, there are also cases where an important local center is formed, which is entirely asymmetrical. Let us look at some examples: These motifs come from the GREEN CARPET WITH LEAVES,[25] from the WHITE FIELD BIRD CARPET,[26] from a WHITE FIELD LADIK,[27] and from the LARGE OCTAGON CARPET from Konya.[28]

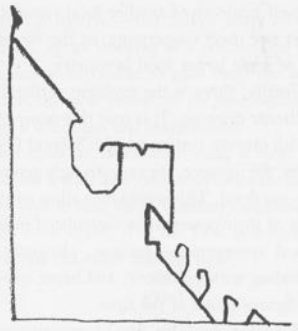
It is obvious that each of these elements also appears as a "whole" within the design — and certainly creates a local center through its presence. Yet each one of them is, at least within itself, asymmetrical. It is plain, therefore, that some local centers are not created by local symmetry.

Hook from the Large octagon carpet, Konya

25 Page 163.
26 Page 269.
27 Not illustrated in part 3.
28 Page 209.

In each of these cases, the shape, standing out as it does from its surroundings, the interlock with the surrounding field, the strong boundary, and the distinctness of the entity so formed, all help to form the center.

Before we jump to the conclusion, however, that symmetries are after all, therefore not important — let us make several additional observations. These asymmetrical cases are rather rare. If one looks through the carpets, there are relatively few cases where an obvious local center is formed by a completely asymmetrical figure,



Corner detail from Large octagon carpet, Konya

as in these cases. Evidently then, centers formed by local symmetries are the rule; and these asymmetrical cases are exceptions.

And, even in these asymmetrical centers each center is part of a larger whole where the asymmetrical figure appears in the opposite direction, thus forming a larger symmetrical whole. This is true in every single case. Thus even these very rare asymmetrical figures, appear only in situations where there is an equal

and opposite counterpart, so that the two together form a larger, and symmetrical figure.

In addition, each of these asymmetrical motifs, is itself made up from very large numbers of smaller local symmetries. Thus the white "bird" is made up from triangles, the asymmetrical flower, has a symmetrical body, with locally symmetrical figures grafted on to it, the asymmetrical hook, is itself made up from locally symmetrical triangles.

Thus, even these rare asymmetrical figures, are themselves internally replete with local symmetries.

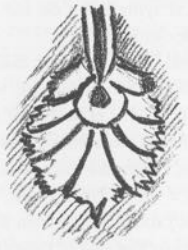
There are no cases, where there is some large, completely asymmetrical figure, which is not itself made up of smaller local symmetries, and is not itself cooperating in the formation also, of some larger local symmetry.

Finally, there is the problem of floral and curvilinear drawing. It is true that many of the Turkish carpets, compared with Safavid Persian carpets, for instance, are very strongly geometrical — not floral. This would then allow an explanation of their power to be formulated in terms of local symmetries — because, obviously, we are dealing with geometric, and hence symmetrical figures much of the time.

But what about the floral compositions that are clearly not geometrical. Many of the most beautiful Turkish carpets, especially from the Ottoman period, are made of delicately drawn flowers, tendrils, blossoms, leaves, intertwining and rambling.

If the explanation of a carpet's power is to be given entirely in terms of local symmetries, how then do we explain the beauty and feeling of these lacier, more floral designs.

In order to study this question, let us look at some of the delicately floral motifs, which appear in the carpets of this collection. We begin with the most purely floral of all the carpets in the collection: the 16th century COMPARTMENT CARPET WITH FLOWERS.[29] Here the beautifully drawn flowers dazzle through their colors and their realism. How can we describe these structures in terms of symmetries. Let us draw two or three of the blossoms themselves. Although the drawing is curvilinear, not angular, still there is an overwhelming emphasis on simple regular forms, which produce local symmetries within the blossom: the stem, the dark spot in the middle of the central "eye," each petal symmetrical, and with symmetrically drawn fronds, the gradient of petal size



Flower from the Compartment carpet is made of symmetries

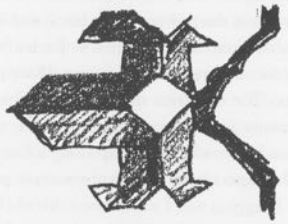
and shape, similar on both sides, and culminating in the "head" petal, boldly symmetrical itself, with a central spur, and two symmetrically placed smaller spurs. The asymmetry of the design is almost minor, compared with this powerful use of local symmetries.

The remaining motifs also come from some of the most floral carpets in the collection: the SMALL MEDALLION CARPET WITH SQUARED MIHRABS,[30] and the STAR CARPET WITH FLOWERS from Karapinar.[31]

Again, in each case, what looks floral at a distance, is in fact a composition made up of many minute triangles, hexagons, parallelograms, rectangles, octagons, and squares. Thus, although the

29 Page 281.
30 Page 215.
31 Page 213.

More pure symmetries in a flower from Small medallion carpet



Archaic flower from Star carpet with flowers

curvilinear look of the floral composition seems to be made of curving, non-symmetrical lines and figures, on close inspection it turns out that after all, these flowers too, are made of geometrical elements — *each one replete with dozens, perhaps hundreds of vital local symmetries.*

If you doubt, for a moment, that this important feature of the flowers *matters*, I suggest you try to draw these flowers, in such a way that they are no longer made up of geometrical and symmetrical figures — but follow more closely the natural, figure drawing of a pencil. You will find it nearly impossible to give them the same coherence, the same power, or the same sustained sense of a wholeness and centeredness.

Once again, as in the other cases, it turns out that after all, it is the local symmetries which are doing the work even in these floral, rambling compositions.

And once again, it is the local symmetries which create the color and the light.

CHAPTER 7

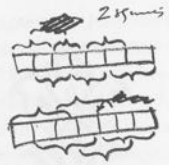
THE DENSITY OF LOCAL SYMMETRIES

We have seen, now, that the center, in a carpet, is a microcosm of the wholeness which can occur in space — and we have seen, also, how the presence of a center in the visual field, depends to a great degree, on the presence of various interlocking and overlapping local symmetries.

Evidently, then, there must be some deep connection between the presence of local symmetries in the visual field, and the phenomenon of wholeness which occurs there.

In this chapter, I shall try to make this connection precise. I shall introduce the subject with

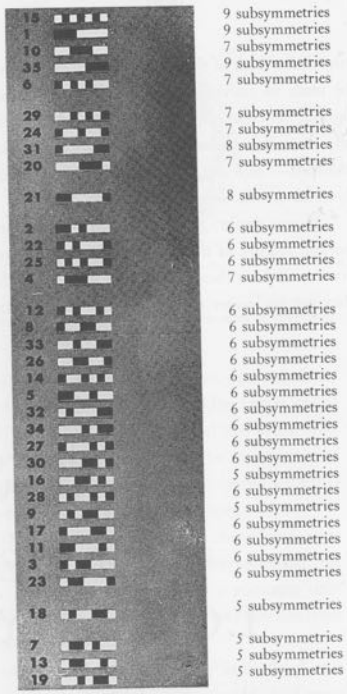
an experiment which I made at Harvard, almost 30 years ago.[32] The experiment concerned the perception of thirty-five simple black and white strips, like those illustrated below. Each of these strips contains three black squares and four white squares. The 35 strips include all possible arrangements and permutations of these three black and four white squares, along a line.



The possible segments in a strip

The experiment had two important parts. First, Huggins and I established that the relative coherence of the different patterns — operationally defined as ease of perception — was an objective quality, that varied little from person to person. In other words, the perceived coherence is not an idiosyncratic subjective thing, seen differently by different people. It is seen roughly the same by everyone. The photograph shows the strips in experimentally determined order of coherence. The most coherent are at the top, the least coherent at the bottom.

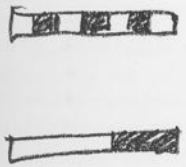
Second, we were then able to identify the structural feature of these patterns which *caused* this perceived "coherence." It turns out that the perceived coherence depends on the number of local symmetries present in the pattern. To count the local symmetries in one of these strips, we consider the strip as made of seven adjacent squares. There are then a finite number of connected segments made of 2, 3, 4, 5, 6 or 7 adjacent squares (One that is 7-squares long, two 6-squares long, three 5-squares long, four 4-squares long, five 3-squares long and six 2-squares long — twenty-one segments in all). In any particular strip, with a particular pattern of 3 black and 4 white squares, we now examine each of these 21 segments, one by one, and ask if it is symmetrical or not. It is obvious that we can look at the whole strip of seven squares and ask if it is symmetrical or not. Most of the time it is not; sometimes it is. But we can also ask this question about *any* connected segment within the pattern. Thus we can look at the first three squares of the pattern, on the left-hand end — and ask if this group of three



Thirty five strips used in the experiment

32 Christopher Alexander and Bill Huggins, "On Changing the Way People See," *Perceptual and Motor Skills*, Vol. 19, 1964, pp. 235-253, and in Christopher Alexander and Susan Carey, "Subsymmetries," *Perception and Psychophysics*, Vol. 4, No. 2, 1968, pp. 73-77.

squares, *taken as a unit*, is in *itself* symmetrical. If for instance, it reads black-white-black it is symmetrical. If it reads black-black-white it is not symmetrical. We can examine every one of the 21



Two examples of strips with high coherence

connected segments in the pattern, in this way. In each pattern, some of these twenty-one segments are symmetrical and some are asymmetrical. In the most coherent patterns, as many as nine of these segments are symmetrical. In the least coherent patterns, only five of the segments are symmetrical.

Thus, apparently, the perceived coherence of the different patterns depends almost entirely on the number of symmetrical segments which they contain. Since each of the segments which is symmetrical is a local symmetry I summarize this whole result, by saying that the most coherent patterns are the ones which contain the largest number of local symmetries or "subsymmetries."

This is the essence of the experimental finding which Huggins and I made in the early 1960's.

Let us now try to extrapolate from this simple experiment, to the coherence and wholeness of a carpet.

First, we may view each of these strips like a motif in a carpet: that is, as a center which occurs in the larger field of the carpet. In this case, the result of the experiment may be interpreted to say that a given motif or center will be more coherent, and will function as a discernible, independent, and autonomous whole (that is, as a good center) in the larger carpet, to the extent that it is made, internally, of local symmetries. *In other words, the more local symmetries each center contains, the better it is as a center.*

Second, we may view any one strip by analogy to the whole carpet. In this case we may then interpret the various local symmetries which appear within the carpet as the different discernible centers that exist there. In this interpretation, the result of the experiment tells us that the more centers there are in the carpet, the more coherent it will be as an entirety.

If we combine these two interpretations, we obtain, a single formulation which gives us the basis for our study of carpet patterns. This combined result may be expressed in the following way: *Every carpet is, at one and the same time, a system of centers, and itself a center. Its goodness depends on the number of centers it contains, and on the number of local symmetries which each of the centers is made of.*

The carpet will appear coherent to the degree that it is composed of smaller centers: the more centers it contains, within itself, the more significant it will itself be as a center. And the same is true of every element within the carpet. To the extent that any given center is itself, made up of further smaller centers, this center is powerful and significant. A given center becomes more and more strong, and more and more significant, to the extent that it is, indeed, a center — and it becomes a center, to the degree that it is composed of other, interacting centers.

Thus there is a curious bootstrap effect, an almost circular proposition, at the basis of the phenomenon which we are studying. Centers are made up of other centers. A center is an organization (or field) of other centers. It achieves its significance to the degree that each of these other centers which it is made of, is itself significant. And an entire carpet, being merely yet another center in the endless hierarchy of centers, also achieves its significance to the degree that it, itself, is also made of other centers which are significant.

With the increasing clarity of the role played by local centers (and local symmetries) in a car-

pet, we are now ready to appreciate the importance of several of the more classic types of Turkish carpets — the Lottos, Holbeins, bird carpets, and star Ushaks. These carpets, long famous for their beauty, all rely on a type of

The multiplicity of symmetries in a small pattern Holbein

design which is a multi-centered lattice, that derives its strength entirely from the amazing multiplicity of centers which it contains. In the case of the Lottos and Holbein carpets this lattice is obvious. In the case of the bird carpets, the lattice is less visible and therefore less obvious — but nevertheless still the foundation which gives the carpet its power.[33]

Let us look at the lattice of a Lotto carpet, shown on the opposite page. This is the well-known yellow lattice on a scarlet field. The lattice has four different "types" of major centers. These are the skeleton on which the design is erected. But then the intricacy of the lacework is constructed in such a way that there are a truly dazzling number of different local symmetries which show up in the design.

Thus, for example, we see #1, a large octagon (cut off) forming a center in lower left. We see #2, a kind of large cross shape slightly right of center. We see the remnant of a lobed design around the diamond which is itself centered on #2. Below #2, we see center #3, another lobed figure, similar to the one which surrounds #1, more distinct. As center #4, we see a diamond, with infurled hooks, to the left of #2. Then, a little larger, around #4 a square in the red; then still larger than that, an hour-glass figure, still in the red; and larger still the yellow and red diamond which it forms, by including the four yellow flower heads.

Thus, at the very largest level, there are four main types of centers each creating a local symmetry. And each of these has four or five major local centers surrounding it — each one again creating a distinct local symmetry. Thus, at the largest level there are as many as sixteen or eighteen different types of local symmetries, each one repeated over and over again as we traverse the lattice, each one interlocked and overlapping all the others.

These complex levels of local symmetry are indeed amazing. I remarked in the last chapter, that the power of local symmetries was unusual, in part, because one did not always appreciate the difficulty of creating a structure with an unusually large number of local symmetries. The lattice in the Lotto design is a superb example. One could search for very long, before being able to find another design, with a comparable richness of local centers in it. It is one of the most remarkable arrays invented in the history of art — and there can be little doubt that it has found its perennial appeal, ever since it was invented in the 15th century, precisely because it has this property.

Lower down in the hierarchy, the same richness persists. It is too boring to write them all down — or to read about it — but of course, if one examines the next level of scale, and looks at the figures which make up these centers that I have just discussed, there one is *again* struck by

33 See discussion of the octagon lattice as the basis of WHITE FIELD BIRD CARPET design, pages 269–271.

the amazing richness, and the amazing, almost endless number of different local symmetries which are brought into the design.

Numerically, it is greater than in almost any other carpet type — except for the small pattern Holbein carpets — which also dazzle, in a similar way, by the sheer number of the local symmetries which they contain.

It is clear, from all these examples, that in some sense, the number of centers in a carpet, plays an essential role in its degree of wholeness. The carpets which are most whole, most one within themselves, are those which contain the largest number of centers, in the most complex interlock.

And the density of centers not only produces geometric wholeness. It is also the density of local symmetries which allows the color of the carpet to come to life. The astoundingly beautiful color feeling in the Lotto carpet — made as it is only from red, yellow, and occasional spots of blue — is created precisely by the endless interlock of hundreds of centers, at dozens of different scales. It is this dazzling sensation — both calm and full of life — which *is* the life of the color. It comes directly from the density of centers.

Hundreds of symmetries in an early Lotto fragment

CHAPTER 8

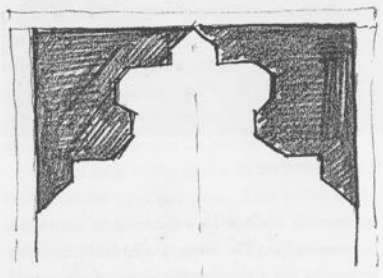
POSITIVE SPACE

In chapters 5-7 I have been trying to show that the *density* of centers which exists in a carpet, is directly responsible for the carpet's depth or power. However, in order to accommodate a rather simple-minded arithmetic account of this "density" — and in order to make counting the centers easier, I temporarily replaced our earlier and richer conception of a center, with the rather simpler, and more easily defined notion of a *local symmetry*. Using this simpler definition of a center, we have indeed found a substantial correlation between the density of centers, and the power of a carpet design.

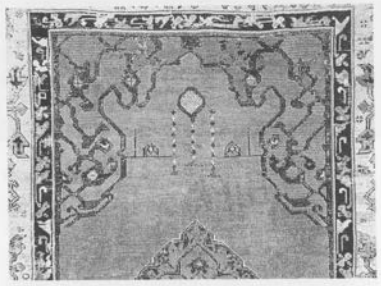
Now it is time to go back to the more sophisticated view of what these centers really are. In this chapter and the next, I shall try to give a more complete view of what a center is — one which is clearly tied to the idea of a local symmetry, but which also contains the full range and subtlety of the concept of a center as I first sketched it out in chapter 4.

To get a deeper understanding of the nature of a center, and the way in which centers create wholeness through the density of local symmetries which they create, I shall explore three consequences of high density of local symmetries. Each of these consequences describes an aspect of wholeness, which is part of the deeper understanding of the nature of a center — and *which follows directly, from the rule that local symmetries should be as dense as possible*.

When we examine the most powerful "wholes," we find that they are most often given their strength or power by the very strong use of "positive space." What I mean by this, is the fact that shapes are drawn in such a way that both figure, and ground, simultaneously, seem to have good shape, or strong shape. Let us look at some examples. Here for example are the



Powerful positive space in niche shape of 15th century Ushak



Weaker positive space in niche shape of 16th century version

niches from two small medallion Ushaks, one 15th century, the other 16th, both in this collection. The earlier carpet, with its stiffer more angular drawing, forms powerful positive space in the spandrel, so that the spandrel actually echoes the niche shape. In addition, the straight lines it is made of, create a variety of smaller

centers at different points along the boundary of the niche. In the later carpet, this positive space has disappeared almost altogether.

On this page we see a simpler example: a minor border from a 17th century Konya carpet.[34] The positive space is very good. It is not hard to see that this example gets its strength from the accuracy of the positive drawing of the "negative" space, which surrounds each figure. We may see this, very easily, just by redrawing

Positive space in the minor border of the 17th c. Konya

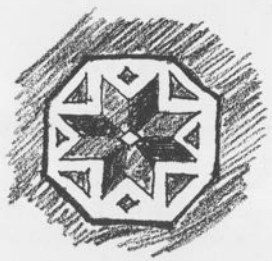
Badly shaped space in redrawn figure: typical 19th c. border

it in such a way that the figure is preserved, but the ground loses its shape. The result is typical of 19th century carpets. The motif loses its power, and indeed, this loss of the proper figure ground relation is one of the things that precisely typifies many *later* carpets. Apparently, the weavers, going through the same process which we have recently gone through in the West, of losing their coherent perception of space — began to see only the motifs, without the shape of the space between motifs — and thus began to copy the motifs, without copying the space correctly, and producing these later generations of carpets which we call degenerate. They are degenerate, precisely because the unity created by proper handling of space *and* motifs, is lost.

The treatment of the "negative" space between motifs as *positive*, is probably the single most important factor, in determining the density of centers, in a carpet.

In a really good carpet, there is no distinction between figure and ground; every single piece of space, or almost every single piece, is a center; and the resulting density of centers is enormous, since there are centers everywhere, intertwining, interlocking, overlapping, and side by side.

If we examine the design of the GHIRLANDAIO CARPET carefully, we see that even in the tiniest details, as shown below, squares, triangles, are arranged throughout the space, so that every single part of the carpet's field belongs to some structure which is suggested or created by the lines. It is all positive. And, as we see in the



Positive space in the octagon of the Ghirlandaio carpet

34 The LARGE CARPET WITH RAM'S HORN FIGURES, page 329.

drawing, the same positive character is meticulously kept even in the drawing of the smallest details, like this octagon carefully and exactly made of tiny triangles.

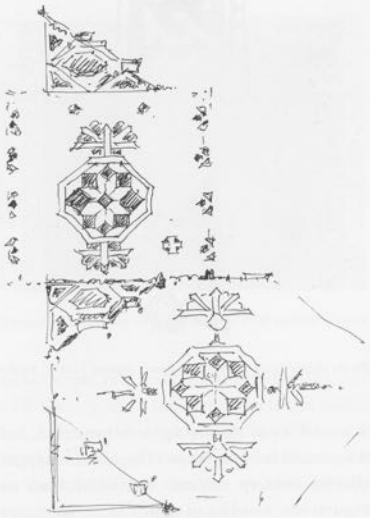
By contrast, in a poorly organized carpet — in a typical 19th century Caucasian or Persian carpet, for instance — there are various motifs strewn all over the ground-field — but the ground itself is shapeless, left-over.

Compare the way the motifs are arranged in these two examples: It is obvious that the one below, which has centers "between" the other centers — must, almost by definition, have a far larger number of centers than the one above, which wastes so much space between the few centers that exist, by allowing large areas where no centers at all occur. It is an almost infallible rule, that the presence of beautifully organized centers in the "negative" space, is the clue to the beauty of a carpet. When the negative space is

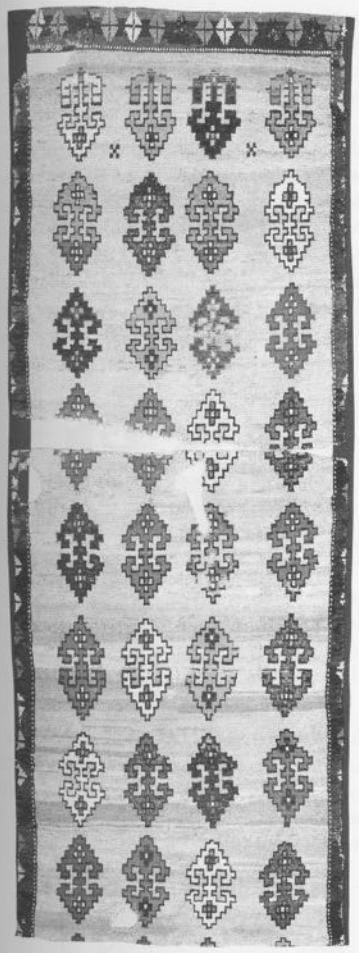
Motifs scattered in the field without positive space

powerful, well-organized, we almost always have a design of power and beauty. When the negative space is poorly organized, shapeless,

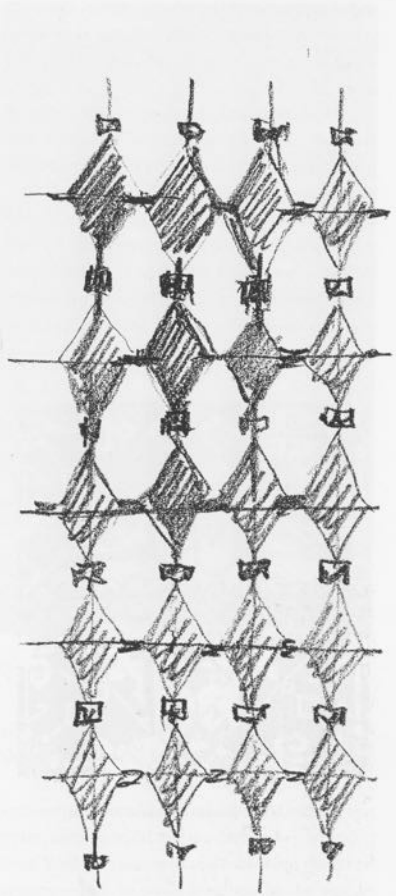
Positive space in every nook and cranny of the Ghirlandaio



Positive space in the Ghirlandaio carpet



Yellow carpet with stepped medallions



Positive space in the yellow field between the medallions

and lacks centers, we almost never have a carpet of any artistic value.

This is the main idea of the YELLOW CARPET WITH STEPPED MEDALLIONS. It is a grid, of centers *in yellow*, formed by connected *yellow* diamonds which form the grid. The multicolored odd-shaped figures which first seizes our attention are actually the left-overs in the interstices of this grid (shown white in my diagram). In the carpet itself they catch the eye first because of their bold shape and bright colors. But if the carpet consisted merely of these figures scattered on a ground, then interesting as the figures are, the carpet would still be trivial. It is the power

and organization of the negative space, the solid yellow grid, interlocking with the figures — which gives the carpet its meaning and significance.

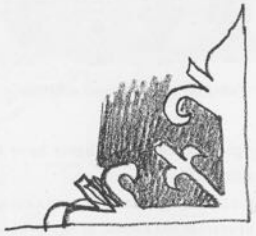
Another fascinating example of the power of negative space. The placing of the green and white motifs, on the crimson field of the PURPLISH RED CARPET WITH BLACK, WHITE AND YELLOW SHIELDS would be trivial, if it were not for the extraordinary shape of the red space, formed by these motifs.[35] This is the real shape, and where the substance of the carpet lies: in the shape of the pieces of red which lie between the green and white motifs. We may describe this quite simply, in terms of centers, by pointing out that the carpet does not merely have green centers and white centers (as it seems to do at first), but a second system of red centers, lying between the others.

This draws attention to the subtlety of the idea of a center. If the carpet were less well organized than it is, and the red areas between the green and white faces, were shapeless, then there would be no centers there. But this implies that an area may be more of a center, or less of a center, according to the detailed subtle configuration of its shape. If the green and white figures were just slightly differently placed, the red would no longer form centers — the red centers, then, are an almost evanescent by-product, of the exact placing of the green and white faces — it is the green and white faces which produce the red centers, by their exact location.

Part of the Byzantine-Timurid prototype

The arrowhead between the arrowheads

16th century Turkestan: the shape has an arrowhead form



And the space too, has an arrowhead form

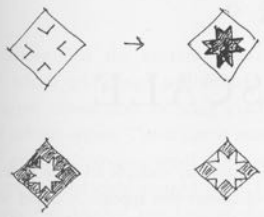
35 Please refer to photograph on page 333.

It is obvious, from the preceding pages, that the space between centers, must itself be positive and *made of centers*, to make centers powerful. This is what always happens in a really good carpet.

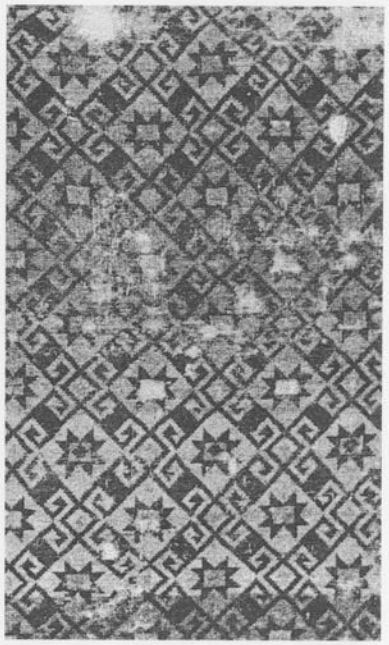
It is not very hard to see how this positiveness of space, that surrounds the centers in a design, follows directly, from the rule that a good carpet must have as many local symmetries as possible in it.

The difficulty of getting the space between the stars

Quite simply put, if we make the space between the various centers, and symmetrical motifs, positive, this means that there are as many extra centers — and hence local symmetries, in the space between the other centers, as among the centers themselves — thus the presence of positive space *literally doubles the number of centers*, or symmetries which we may expect to find in any given design. Turning this rule around, we can see clearly, that the presence of positive space, in a design, will follow directly, from simple-minded application of the rule that there should be as many local symmetries as possible.



If cross drawn right, a 45° square at the end of each arm



Perfect space in the Seljuk carpet from Beyshehir

If we try to increase the number of local symmetries, then any piece of space, which appears asymmetrical or un-centered — typically these kinds of space will occur between the other centers — will be made positive, by the simple act of making it locally symmetrical.

The repeated application of the rule, which demands that the number of local symmetries should be increased and increased, as far as possible, will gradually generate positive space in all the interstices of a design, and will, slowly but surely, guarantee the emergence of just that hard, densely packed, shaped structure, in which we see the space as positive.

Here are some detailed examples of the way this works. Look, for instance at the central motif

in the BYZANTINE-TIMURID PROTOTYPE. We see the four-fold spade motif is one of the key motifs. It is obviously made of many smaller centers. But if we look carefully, we suddenly notice that on the diagonal, there is yet *another* version of the spade motif, slightly larger, tucked in between the others. We see also, that this motif easily gets distorted. It is when the thing is drawn correctly, and this additional motif is present, that the carpet becomes really good. This can only be done by a weaver who is paying attention to all the centers simultaneously.

Another very similar example, is the almost identical drawing which occurs in the corners of the 16th century Eastern Turkestan CARPET WITH BLUE LOTUS BLOSSOMS ON GREEN FIELD. Again, the space within the motif is a mirror-image of the motif itself, thus making centers in both figure and ground, and making the space positive.

Or, let us consider an even simpler part of the same design: the small diamond which contains an eight-pointed star. When you try to place an eight-pointed star in a diamond, it can easily go wrong. For it to go right, the space between the star and the corners of the diamond, must be square themselves — in diamond position. This is once again the essence of positive space. It is drawn so that the number of additional centers, in the space between the centers, is extremely high. This is the essence of the power of the great Seljuk carpet from Beyshehir. It is very simple. But the space between the spaces, is all of it, dense with smaller centers, carefully and accurately drawn.

It is clear, as a corollary, that the individual centers, which appear in such a design, will tend to be centers, which are individually surrounded by positive space — thus the good centers — those which appear most frequently in designs, which have the greatest wholeness — will be just those which are accompanied by dense quantities of positive space.

Positive space is a necessary quality of wholeness, which follows directly from the requirement of local symmetries as densely packed as possible throughout the design.

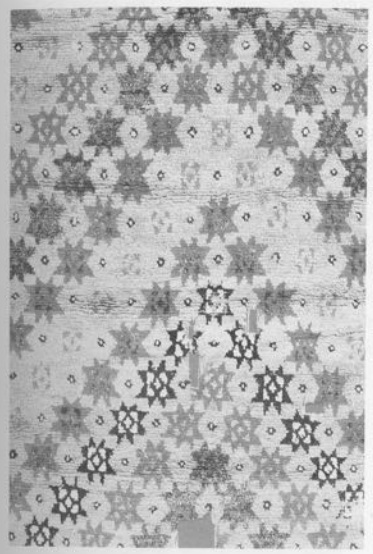
CHAPTER 9

LEVELS OF SCALE

In the previous discussions, we saw the developing distinctness of a figure coming about as a result of adding various local symmetries. You may have noticed that the local symmetries that get added, are often at different scales. That is, the different centers, which are developed, in order to intensify a given whole, tend to be at different scales — so that in the finished product, we observe a system of centers, nested at a great variety of scales.

We shall now focus our discussion on this particular topic, by itself, and see the essential role which is played by multiple levels of scale, in the system of centers that appear. A carpet which is full of local symmetries and which has good positive space, can even now still be boring. For example, one structure which has many local symmetries and good positive space is an infinite chessboard of small squares. Although extended chessboards, and similar figures do appear in many carpets, they could hardly constitute the *whole* of the carpet — since there really wouldn't be enough structure to look at. This obvious point, may be understood formally by means of an additional

property which the centers in a carpet must follow: *some of the centers must be large enough to hold the design together*. This simple rule leads to remarkably complex results.



Almost a checkerboard, but gets some larger structure

Consider first the YELLOW KONYA WITH STARS[36] whose field design is illustrated above. This carpet comes close to being exactly that kind of infinite repeat. The design is made of an infinite grid of alternating small yellow squares, and small colored eight-pointed stars. The fine structure, the detailed interlock of these two figures, is complex and subtle. However, in spite of this subtlety of the fine structure, the overall arrangement, is still really little more than an infinitely extended chessboard of alternating dark and light. In order to create something, some visible structure, on this infinite ground, the stars are then made in various different colors, so that what we actually see in the carpet is a series of nested, multicolored diamonds, appearing out of the matrix of the infinite repeat. If it were not for these larger centers, created by the variation in color, the carpet would not have enough structure to hold onto.

The point is obvious. Structure must be introduced in reasonably large chunks, in order to have an impact on a design. I can state this more clearly, and more numerically. Essentially, any given entity that appears in a carpet — any center — must contain at least one center which is about half the size (in diameter), and must be contained in another which is about *twice* the size. Under circumstances where both these things happen, the center remains strong.

We may see this principle at work in the drawing of the GREEN FIELD "MONGOLIAN" VILLAGE CARPET, shown on the next page. This carpet certainly gets its magnificence, in part, quite simply from the fact that the cartouches in the border are so big — and indeed, from the gigantic width of the border itself, in relation to the field. The border is fully half the width of the field — very rare in carpet design — but immediately establishing the 50% rule, in the relation between these two largest centers — and the cartouches are large enough to occupy half the size of the end border, in a single motif — and the smaller cartouches are, once again, half the size of the larger ones — thus the cascade of the sizes, is there, and creates the dramatic boldness of this carpet, in a way that is extremely rare in others, where these scale relationships are more delicate, and less profound.

In fact, the fundamental rule is this: *A center will become distinct, and strong, only when it contains, within itself, another center, also strong, and no less than about half its own size*. This rule seems clear enough, until we recognize that a number of endless repeat designs — the small pattern Holbeins, Lottos, and bird carpets, apparently break the rule. After all, in these car-

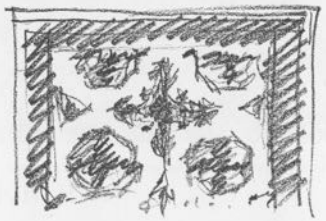
36 Not illustrated in part 3.

pets, if we consider the entire carpet as a center, then there needs to be some other center, which is no more than about half the size of the carpet.

Levels of scale in the drawing of the "Mongolian" carpet

This is true in all medallion carpets, in prayer carpets, even in saphs — but it does not seem to be true of the endless designs which I have just mentioned. Does this mean that there is something lacking in these carpets. Would they be better if they did follow the rule.

The idea that these carpets do not follow such a structure is only an illusion. Consider for example, the SCARLET AND YELLOW LOTTO CARPET in the collection.[37] This carpet has one large center, that dominates the entire upper-half of the field (all of what remains now in the carpet). This center consists of a cross, surrounded by four octagons, each itself cross-like. If we want to see this diagrammatically, we may represent the carpet like this: We begin with a square — one cell of the array. Within this square, there is a center about half the size of the square — namely, the diamond-shaped field. Inside this diamond-shaped field, is the foliated octagon, again about half of the diamond in size — and with it, each of the four spandrels, once again, about the same size as the octagon.



The "big" structure of the Lotto fragment

16th century Lotto fragment

37 Page 245.

Within the larger octagon of the center, is a smaller octagon, with a diameter just half of the diameter of the larger one — and further, each of the four main lobes of the larger octagon, is itself a center, once again about half the size of the larger octagon. Within the smaller octagon is a star, only slightly smaller than the octagon: and within this star, is a much smaller star, about one-third of the diameter of the octagon itself. Thus the rule is applied, consistently, over and over and over again — *it is this rule which keeps the design intact and coherent.*

If the rule is relaxed, the design begins to fall apart. For instance, the 18th century ERSARI PRAYER RUG[38] shown below, though very beautiful, is weak in this regard. Consider the center formed by the whole mihrab. This center is well-shaped and bold. But at the next smaller level there are only two centers — the head which is octagon or hexagon-like — and the red mihrab inside the white one. Both these are in themselves reasonably well-formed. But there are other parts of the carpet where there is *no* distinct entity at this intermediate level. The spandrel does not contain any center of an intermediate scale. The smaller red mihrab itself contains no other center half its own size. The white field of the main mihrab, does not contain any centers half its own size. The hexagonal head at the top, is much less than half the size of the mihrab, and does not quite have the strength to hold the design together. The next level centers are very weakly drawn indeed: there are no substantial centers in the white field, until we get several steps down in scale. If a center is made up only of much smaller centers, and there are not enough middle-sized centers to hold the larger center together, then the larger center will usually not be strong enough to create any deep value at all.

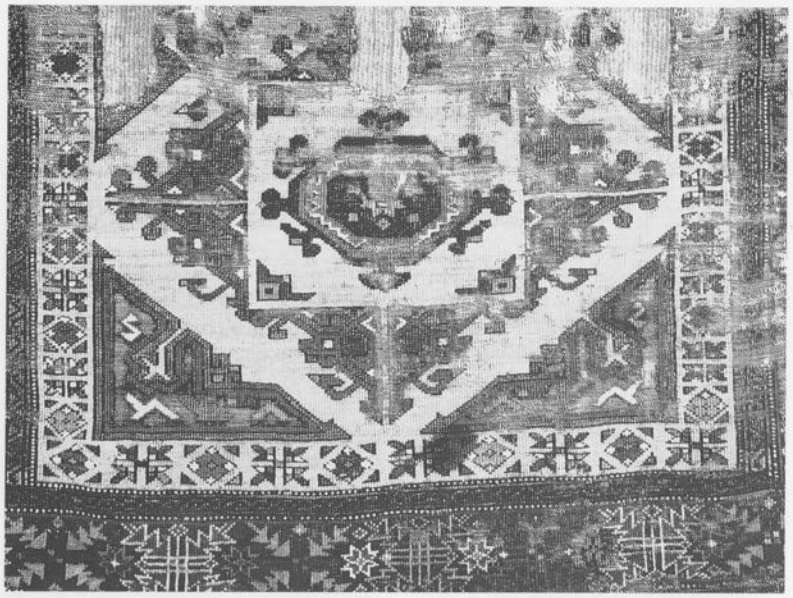
Ersari prayer rug, 18th century

By comparison, in the magnificent 16th century COUPLED COLUMN PRAYER RUG WITH EIGHT COLUMNS[39] all the intermediate levels are fully packed with centers. For each entity that we see, there is a nested, or related center which is fully half the size of the larger one — and the cascade of levels or steps in size, is thus completely and magnificently present.

We begin to see how the extended use of the levels of scale, starts to creates a comprehensive unity, because the rule is applied over and over again. On the next page, for example, is a part of the 15th century TWO PANEL CARPET of this collection. It is extraordinarily intricate — so much so that space and solid inter-penetrate, melt, give way one to the other, until we can hardly tell them apart. This is what makes the design look like a seamless, unbreakable whole. *And the quality comes about from the very great number of levels of structure which are in the carpet.*

Each entity which exists is made of smaller entities. There is a rough rule of thumb, that each entity is about 1/3 or 1/2 of the size of the next larger entity. But in addition, the way the smaller

38 Not illustrated in part 3.
39 Page 241.



15th c. carpet in which dozens of levels of scale are visible

entities are cut out of the larger ones, developed out of them, creates ambiguities and connections which produce — in the whole — a seamlessness.

Thus the idea that each center exists at many levels of scale, gives rise to a more complex structure, in which entities at different scales overlap, in an ambiguous web where large and small are united to form a complete and seamless unity.

The real importance of the many levels of scale, does not lie merely in profusion of detail. Piling on detail would accomplish relatively little. What makes the difference is the extraordinary number of levels, in which every level takes, as its job, the task of making larger wholes in the design. When this is done properly, *the small intricate pieces of the design, are calculated to make the subtle ambiguity at the larger level possible. They are not merely random decorations, and "nice little stuff." They are details which follow, necessarily, from the weaver's task of forming and uniting larger wholes within the design.* The subtle interweaving of larger wholes *would not exist, and could not be accomplished*, without these small details. Thus the small details are highly specific, calculated to do the job, and necessary to the success of the larger wholes.

We see from the foregoing argument, that the real depth of any center comes from the fact that it exists, and works, at many levels simultaneously. In such a center symmetries and positive space do not only occur at a single level, but at many levels, each one nested in the one above it, each being detailed, or "having children" in the ones below it. This is a vital aspect of a carpet, as it is of any living form. The most obvious feature of the degeneration of later carpets, lies in the fact that this detailed structure gets simplified, and the careful creation of many levels of scale gives way to designs which have many fewer levels in them.

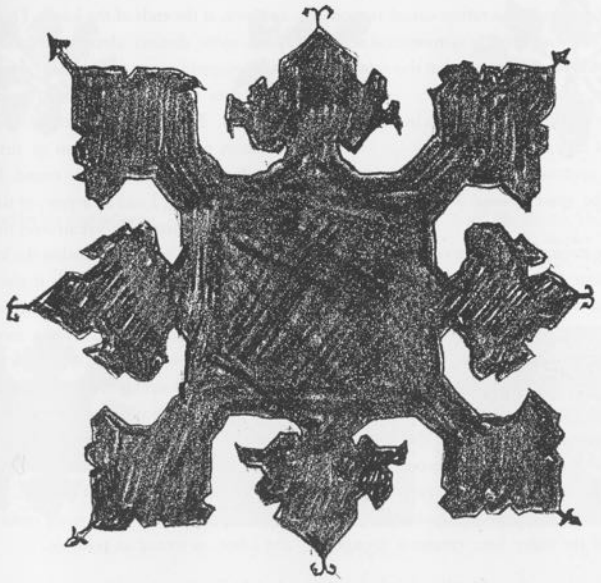
CHAPTER 10

DIFFERENTIATION

I have emphasized the role which local symmetries play, in the creation of a center. We have seen that the more local symmetries there are in the vicinity of a center, the more powerful the center which is created from them. However, in the creation of a powerful center, a second kind of process is also going on: the process by which the center is made *distinct*. This is the process by which the center is distinguished, differentiated, set apart from the immediate surroundings round about it.

The need for distinctions of color, and tone and color, is fundamental, of course, to the way that a carpet pattern is produced. But the need for this distinctness of the elements goes far beyond the need for dark and light, or color differences, between the smallest pieces. The fact is, that the design does not work unless it is made up of a number of distinct, identifiable entities, each with its own identity. These are exactly the centers which we have been discussing.

Let us consider a relatively simple form, which has this kind of distinctness — and ask how it comes about. For our example I take the very strongly-shaped interlocking lobed star of



Central star from star Ushak, a highly differentiated form.

the STAR CARPET WITH CENTRALIZED DESIGN from Ushak.[40] This star does have exactly this feeling of distinctness and differentiation. It is a strong shape. It stands out from its background.

Where does it get this quality? What are the ingredients of its distinctness? First, certainly, there is the boldness of shape — the emphatic shape. Next, the negative space, the fact that the white shapes between the shape, are themselves powerfully formed. And then there are the subtle points of emphasis — the small fleurs-de-lys and double hooks, at the extremities, which mark the crucial points in the field. The symmetries play some role, certainly. Obviously the four-fold symmetry of the whole plays its role — yet each of the eight lobes by itself, is already rather strong — and it does not need the duplication of the lobes to give them their strength. As for the axial symmetry of the individual lobes, that is certainly important — they would not work as well, or at all, if they were individually axially asymmetric — but again, the fact that symmetry is rather casual (no one of the eight lobes is perfectly symmetrical about its own axis) also makes it clear that this is hardly the dominant effect.

We may distinguish five ways in which the star achieves its distinctness:

1. The centers next to the figure — those created in the space *around* it — are also very strong.

2. These strong centers are extremely *different* in character from the star itself — thus the distinctness is achieved, in part, by the difference between the centers of the figure, and the centers of the ground.

3. There is very strong color difference between field and ground.

4. The complex character of the boundary line seems, at least in this case, to contribute to the distinctness of the form. Thus, paradoxically, the unity of figure and ground, caused by the in-and-out of the outer line, creates a stronger distinctness than would be achieved if the exterior line were sharper, and less imbricated.

5. The hierarchy of levels of scale in the centers also help to create the effect, by increasing the degree to which the form is perceived as a whole, entity, or being in its own right.

Of these five observations, three can be summarized by saying that the form achieves its distinctness because of the number of smaller centers which it contains (1, 4 and 5). The other two points (2 and 3) depend on the differentiation of the center from its surroundings.

To understand how this distinctness is created, and how it contributes to the power of each center in the carpet, I shall follow an imaginary process of differentiation, shown on the right-hand page, in which we imagine how the star gets it form. The process starts with a simple cross. An elementary center. Now consider, intuitively, a process in which we try to make this cross more "centered." First, I add small dots, in pairs, at the ends of the lobes. This makes the lobes more distinct already. Second, it makes them slightly more distinct still, if I add these little dots in such a way as to make the dots squarish. This has a stronger effect on the distinctness of the figure, than at first, when I merely add the dots as little round dots.

And finally, I add an arrow, or dart, in each of the four corners. This reinforces the structure which is developing, and makes the lobed figure still more distinct — although it also begins to transform it, and make it into something else — but it is something else with a more definite character. Now, I seize on the form which is emerging, and strengthen it still further. To do this, I make each of these dots in the four corners, lobe-like — suddenly the thing has eight lobes, instead of four. I keep on with this. I develop the lobes, all eight of them. To develop them further, I make the space inside, between the lobes, as strong as possible.

40 Page 263.

This is the undifferentiated vague cross

Here we increase the symmetries by making the lobes distinct

Now we add a symmetry across the ends of each lobe

Here we add a symmetry in the axis of the little bobbles

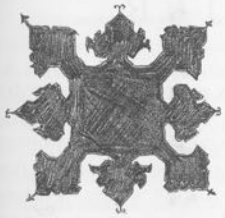
Now strengthen the diagonal

Here we add one more square, and so add another symmetry

Now strengthen the diagonal again

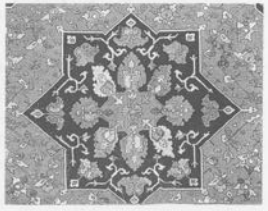
Here we add one more square, and so add another symmetry

As the lobes develop, the shape becomes distinct



The basic star Ushak form which comes from this process

Further differentiation which makes an even stronger center



Further differentiation in a different direction

Gradually the highly differentiated star emerges from this process. As we see, to do it, I not only have to add symmetries. I also have to make the cross more and more *distinct*. As I do it, the whole thing becomes more and more distinct. To make it even stronger, I have to distinguish the individual lobes, make them as distinct as possible, *within* the whole.

In this example we see clearly, how every step we take to make the figure more distinct, achieves the increasing distinctness, by adding some new local symmetry. Of course, the local symmetry which is added, must somehow be in tune with the ones that are already there — we cannot add them anywhere — but when the one which is added, reinforces the structure of the symmetries that were there before, the figure achieves greater and greater distinctness.

The same process, continued further, will give rise to even more subtle and more complex forms. Illustrated at the bottom of the diagrams, are two famous variants of the Ushak star, that occur on rare carpets preserved in museums.

We thus come back to the key — and apparently circular — result. A center becomes stronger, and more of a center, according to the number of other centers which it contains, *and according to the differentiation of the boundary and centers that define it*.

This subtle proposition does not lead to the conclusion that we can make a good center, merely by a kind of "spottiness," in which we create as many small centers as possible. The presence of a large number of "spots" in random or near-random array, will not necessarily make any centers at all — for the proposition that a center is strong to the extent that it contains many smaller centers, really does hinge on the fact that they are *centers*, i.e. powerful wholes — which they can become, only according to the global organization of the field in which they occur.

Every successful center is made of a center surrounded by a boundary which is itself made of centers. This recursive definition, not circular but enormously powerful, leads to an infinite progression of artistic activity.

CHAPTER 11

THE CREATION OF A COMPLEX CENTER

We now have a partial definition of a "center."[41] However, rudimentary as it is, even in the form developed so far the concept of a center is immensely powerful. It is powerful enough to give us startling insight into the nature of the creative process — and above all, into the nature of what is actually accomplished in the creation of a carpet which is profound.

Let us review the situation. We now recognize the fact that every carpet is made up from entities which we now call "centers." We know that these centers have certain important properties. They tend to be roughly symmetrical — but not always. They tend to be associated with very powerful positive space around their perimeter. They tend to be defined by a boundary zone which is itself made of centers. They tend to contain a fairly dense packing of smaller centers. They tend to be strongly differentiated from other nearby centers, so that they maintain their identity. And they tend to be arranged in levels of scale, so that any center contains another one not very much smaller than itself.

There is a kind of peculiar circularity visible in this definition. In a nutshell, the existence of a center always seems to hinge on the creation or on the existence of *other* centers. And of course, still following the same definition, these other centers depend, in their turn, on the existence and strength of still *other* centers.

It is precisely this complex circularity, which gives the concept of a center the power and depth to be the cornerstone of the creative process, and the lever with which unity is generated in a successful work of art.

To see this more clearly, let us try and trace out the nature of the circularity. We began with the idea of wholeness. I pointed out, originally, at the beginning of chapter 1, that the building blocks of wholeness seem to be centers — since a center is, in essence, a small local packet of wholeness — and that wholeness in the large, is composed of many densely interconnected, interlocking packets of wholeness — woven together to form an unbroken strand. Let us now try to see more closely just *how* this happens.

First, as we have seen, successful centers are not very easy to come by. Some centers are more successful, more powerful than others. And the ones which work do not grow on trees. From the artist's point of view, they are very hard to find, hard to create. Second, according to the definitions we have given, a perfect center would be entirely made of centers — that is it would be composed of a space which is filled with centers everywhere — again, as we have seen, remarkably hard to do.

Thus, if we do nothing more than follow the definitions I have given so far, and ask what is involved in the creation of one center — we are immediately involved in an extremely difficult problem. *Somehow, we have to find a composition which is composed entirely of centers, filled with centers — and further more, this almost infinite array of centers, must all be strong ones — sharp, distinct, surrounded by positive space, and themselves bounded by other equally beautiful centers, and likewise made up of them.*

This is a tall order. Yet this is just exactly what the maker of a carpet tries to do. To understand the difficulty of this task let us go back, once more, to the 35 black and white strips which I described in chapter 6. If we examine the thirty-five possible ways of combining three black squares and four white squares, the different patterns which we get have strikingly different levels of coherence, and do, indeed, contain different numbers of centers, even when we measure this crudely by means of simple local symmetries. Evidently, then, the four or five of the 35 black and white strips which have the largest numbers of centers, and the greatest coherence, are in some sense rare. They are not completely obvious, and it might take some time to identify them or find them.

If we construct a slightly larger, but comparable universe of combinations which has not been analyzed in advance — for example, the various possible ways of arranging 69 black and 96 white squares in an array of 11 x 15 — there are some 10^{47} possible combinations — more than the number of electrons in the earth. Two of these 10^{47} possible combinations are shown on the next page. It is clear right away that there will be no simple way of identifying, in advance, the ones which happen to have very high internal density of local symmetries.

This fact may be underlined, perhaps, if I pick out one particular pattern which does have a high density of local symmetries from such an array. I can do this mathematically, just by counting symmetries according to the rule of

41 Unfortunately even now the definition is still partial. The logical complexity of the concept, and the incomplete nature of the definitions which I have given so far, cannot be covered in a book as short as this. They are given fully in *The Nature of Order*.

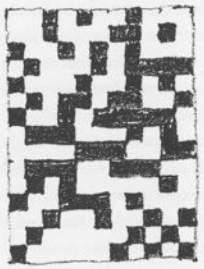
chapter 7, and looking for an array which has a very high number of local subsymmetries internally. The illustration at the bottom of this page shows the kind of thing I get.

This particular array is interesting because it happens to be — in black and white — the basic medallion of two very rare Konya carpets — the 15th century ENDLESS REPEATING DESIGN WITH BLUE LEAVES ON A YELLOW BORDER (page 233) and the 16th century YELLOW CARPET WITH STEPPED MEDALLIONS (page 261). A similar figure also appears in the tilework on the tomb of Timur, Samarkand, 1405. The example is significant, because among carpet collectors there will be almost universal agreement about the somewhat unusual character of this figure. Although it seems simple, it does not, as far as I know, appear on any other known Turkish carpet besides the two mentioned, and it is, for most people who see it for the first time, at once familiar, and unique — unusual — even extraordinary. This figure is thus "hard to find."

How was the figure found by the weaver who made it? Out of the 10^{47} possible arrangements in a tiny array of 11 by 15 squares, it is one of a few thousand that are very dense in local symmetries, Some kind of process of sorting through the 10^{47} possibilities revealed this particular one. But it must have been immensely hard to do.

To say that complex, or profound centers are hard to find, is no figure of speech. It is literally true, and can be stated in an exact fashion. We could, in principle, computerize search procedures for these very dense and unusual configurations which have unusually huge numbers of local symmetries in them. But consider the effort involved in such a computerized search.

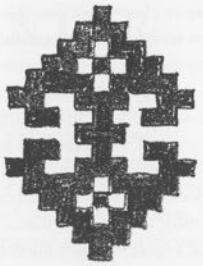
In a figure with 165 cells, like the one we are discussing, there are 10^{47} possible figures. Each one of these figures contains about 10^5 connected subsets which may or not be subsymmetries. To count the subsymmetries in one such figure will therefore require 10^5 arithmetic operations. Even a computer capable of 10^9 complex operations per second, will still need 10^{-4} seconds to count the subsymmetries in one possible figure. A raw search procedure to compare all 10^{47} figures, and choose the one with the largest number of subsymmetries, would therefore take



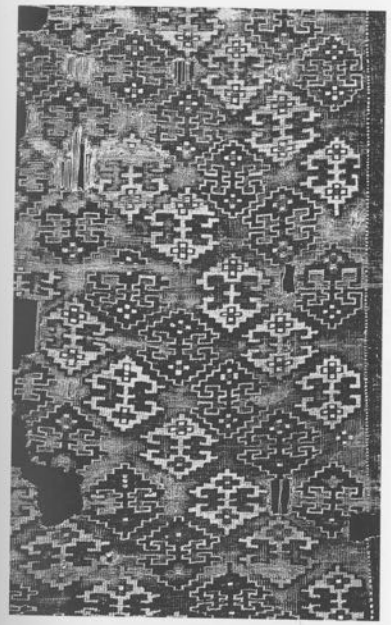
Random array of 11 by 15 squares

10^{43} seconds or about 10^{36} years, an astronomical length of time far greater than the age of the solar system.

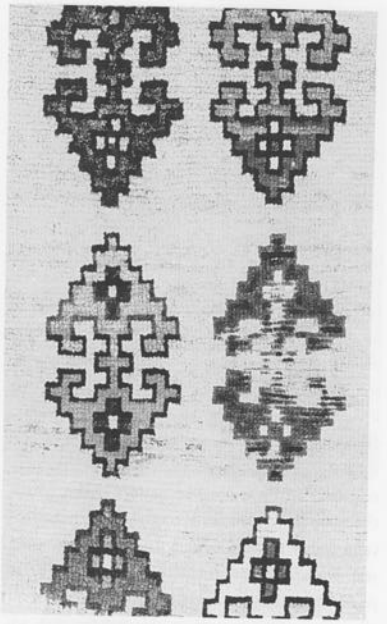
Even an efficient search which somehow "goes to" the ones with dense subsymmetries, will still take a very long time indeed. The difficulty is so great that by any method at all the task will still be enormous. And the difficulty is not merely a difficulty of inspiration, a difficulty



Array of squares which forms the Seljuk pattern



15th century version of this motif



Guls of 16th century Konya

of genius, a difficulty of art — as it might commonly be supposed to be. That would shed no light on the nature of the difficulty. The point is that no matter what method is used, it is mainly sheer hard work that is needed to find the highly dense and beautiful figures. When the weaver finally "finds" or creates a center which has this dense packing of symmetries and centers in it, an achievement has been reached, which deserves immense respect. It is a real achievement, like building the Great Wall of China. Certainly it does not come lightly.

What is interesting about this way of looking at the situation, is that we suddenly see the creation of a great carpet — or the creation of a beautiful figure within a carpet — as a task in which the nature of the difficulty being faced is completely clear. We have to produce a structure in which this multiplicity of hierarchically interlocking centers that I have been describing, exists. And it is obvious, just from the definition, that this is immensely difficult.

All this is just an arithmetic way of underlining the fact that complex, or profound centers, are very hard to find. They are hard to invent, hard to weave, and even hard to focus on mentally. The structure which exists in a really profound center is something magnificent, and difficult. It is an achievement, which has to be reached, and held onto. A wavering of concentration, and it is gone. That is why copies of carpets, made in later centuries, far from the original inspiration, are often degenerate.

Thus the central task of a work of spiritual art, is no longer a mysterious process — which we can merely classify under the heading of inspiration — and forget about it. It is immensely difficult hard work, *in a very specific sense which we*

can define and understand. It is hard to do in the same way that it is difficult to juggle sixteen ball bearings into positions far apart, on a flat board — it involves a juggling act of immense proportions and is very, very hard to do. But what has to be done is well-defined and clear.

Let us try to understand this "juggling" problem even more clearly. When we make a certain shape in a carpet, we already shape the space next door to it. If we now try to modify the shape of the space next door to it to make it more positive, we shall have to tug and pull — modify — the shape of the first shape we drew, or made. If we now try to endow this second shape, which has good positive space next to it — with a boundary made of other centers — even rudimentary ones — we shall have to modify it again — change it some more. If we now require that these smaller centers, from which the boundary is made, are themselves powerful centers, in the sense that they too have good positive space next to them, we shall have to jiggle the whole structure again. If we now seek a configuration in which this center that we have been developing, is itself the boundary of some larger center, which *itself* is also made of many other coherent centers, all with their own boundaries — we have to turn the structure once again.

Thus the work of creating this kind of coherence — is an immense, and almost endless task — extremely difficult, demanding — and yet thoroughly specific. It is unambiguous. And above all it is completely clear at any given moment, whether one has succeeded or not. When, finally, one does succeed, to some small degree — the success is unequivocal — then a valuable structure has been created.

This conception of centers which we have arrived at is so rich that we can define the *whole* creative task of making a beautiful carpet, or a beautiful motif even, merely by saying: *The essence of the creative task is to create one center.* We do not need to say "many centers" or a "multiplicity of centers" — because the phrase "one center" already contains this idea of many centers implicit within it. *All we need to do, is to try and create one center.*

The elaboration which is implicit in this definition, will then take over. The one center which is needed, will inspire, and demand, the creation of many centers — and they in turn will require the creation of other centers. The definition will require their interlock, the positiveness of the space which surrounds them, and their distinctness, and their richness in local symmetries. *And so, simply from the one defining sentence, will grow full blown, the complex wholeness we see in a carpet.*

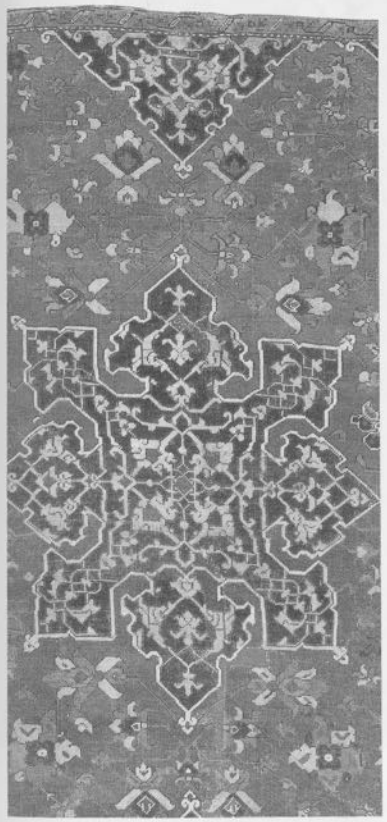
However, even this discussion still does not really convey an adequate sense of the exquisite mixture of discovery, invention and creation, which is required to find a profound pattern of centers. The difficulty has been made clear numerically. But I have still not underlined the extent to which when a deep, densely packed array of centers is finally found — or made — the extent to which this is then truly an achievement. I can best speak about this not as a carpet collector, but from my experience as a builder. There too, in making a building, one is searching for just such a center or pattern of centers — which contains within itself, the full range of the relationships which I have been talking about — dense, and self-sufficient. It may sometimes take weeks, months to find the necessary structure of a particular center. It is hard work, extraordinarily hard work — not at all the kind of thing where shapes merely drop off the pencil — instead, it is hard wrought structure, found with pain and difficulty.

I believe we must learn to see the great carpets in just this way — as creations of amazing subtlety, which are hard won, hard wrought — amazing that they exist at all — amazing that they were discovered.

When we understand this, we shall have a much greater understanding of the reason why traditional weavers relied on known designs. Is it any wonder, that once the pattern which fills the medallion of a star Ushak has been discovered, or once the small pattern Holbein design had been discovered — two of the most densely packed structures of centers which have occurred in the history of carpets — that other weavers then continued for a hundred years or more to use and re-use different versions of this pattern. Such patterns are not easily found, not easily come by. When they are found, they are naturally treasured, used and used again.

Thus we understand the use and reuse of traditional motifs, not so much as a crutch, or as "the way" of Rousseau's noble village weavers — but as an extremely intelligent response to the difficult task of creating one true center. It is so hard, that all the known cases where centers are known to have produced profound results, must be put to use, within the search — and this is why the weaver does it.

The classic forms of the small pattern Holbein



Beautiful inner structure of a 16th century star Ushak

However, even so, the greatest structures, the greatest centers, are created not within the framework of a standard pattern — no matter how dense the structures it contains — but in a more spontaneous frame of mind, in which centers lead to other centers, and the structure evolves, almost of its own accord, under completely autonomous or spontaneous circumstances. Under these circumstances the design is not thought out, conceived — it springs into existence, almost more spontaneously, during the process by which it is made.

And of course, *this* process corresponds more closely to the conditions under which a carpet is actually woven — since working, row by row, knot by knot, and having to create the design as it goes along, without ever seeing the

Early carpet with spotted lobes

whole, until the carpet itself is actually finished — this condition, which would seem to place such constraint and difficulty on the act of creation — is *in fact* just that circumstance in which the spontaneous, unconscious knowledge of the maker is most easily released from the domination of thought — and thus allows itself most easily to create the deepest centers of all.

I cannot describe here, the full evidence which leads me to this statement — it is detailed rather thoroughly, in *The Nature of Order*[42] — but it may be enough to comment, here, at least on the related fact that the most striking structures, the most beautiful centers, appear not in the so-called workshop carpets, which do make use of highly traditional designs — but, instead, in those unique designs, which spring one of a kind, into existence, under the more archaic conditions we have usually described as "village," but which are often not really village carpets at all. Such a carpet is illustrated on the left-hand page. Many of the carpets in this book were made in the workshops of Sufi weavers attached to mosques, working with ultimate seriousness, trying to make a gift to God.

Under these circumstances, occasionally a work appears that approaches the nature of a being, or a human soul. In chapters 12-13 I shall come to this most extraordinary phenomenon which lies at the heart of carpet weaving.

Border detail, Seljuk gul carpet

42 Reference already given, op.cit., Oxford University Press, forthcoming.

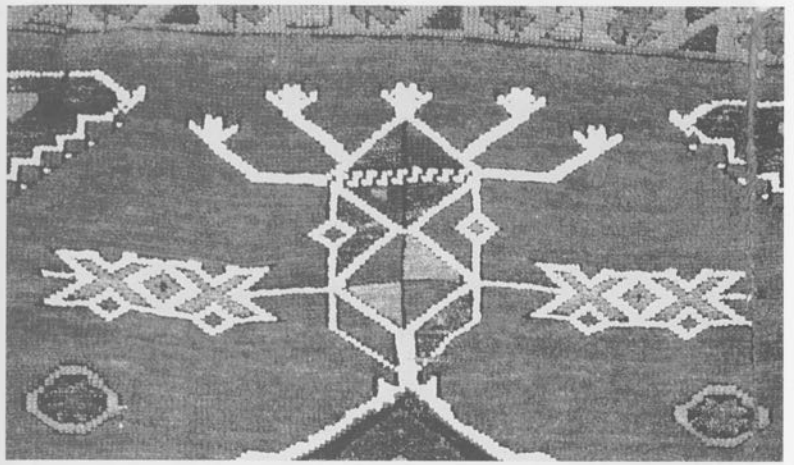
CHAPTER 12

THE ROLE AND CHARACTER OF ANIMALS

Before trying to understand the way that a center made in a carpet actually comes to life, becomes a being, or approaches the nature of the human soul, I first need to make a short empirical digression. It concerns the appearance of animals in carpets, and will prepare us for the culmination of the argument.

It is a fact that many early carpets contain animals or animal forms. This is also true in other forms of Turkish art. The zoomorphic carvings of the 12th and 13th century Seljuks are endless lattices of animal forms intertwined and intertwining — a veritable soup of life. The further back we go in time, the more there seem to be animals literally filling the field. And exactly the same thing was true in early carpets.

Zoomorphic carving from the Seljuk period, Sivas, 13th c.



Horned creature from Carpet with head masks and guls

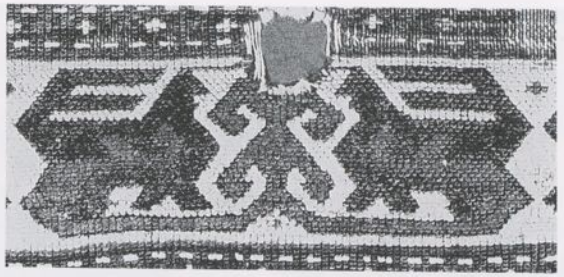
Erdmann[43] states repeatedly that it is the animal carpets of the 14th century, which are the "original" and most important carpets — and that what remain later are merely geometrized carpets from which the animals have vanished.

The presence of animals in early carpets was not arbitrary or accidental. As geometry reaches its "being" nature, it does become animated, almost alive. At that moment, much of the geometric stuff becomes living stuff — and inevitably, animal-forms and plant-forms appear in the geometry. And for this reason, in the earliest carpets, we find animals appearing throughout — almost inseparable from the geometry.

I believe the formation of animals is almost inevitable, when centers are made intense. Animal forms appear among the centers, simply because a special unity appears, in geometry and color — and then leads to the formation of virtual living creatures as the centers become suffused with life. In the highly detailed geometry of Seljuk architecture, there are zoomorphic forms, indistinguishable from the geometry, making their appearance constantly throughout the space. The same thing happened in carpets. In the earliest carpets of this collection we see animal traces and actual animals, again and again throughout the fabric of the geometry. In the BLACK BORDERED CARPET WITH GODDESS AND DEER, the goddess is flanked by deer.[44] There are dragons in the WHITE FIELD SELJUK CARPET WITH ENDLESS REPEAT OF DRAGONS.[45] There are leopard spots in the CARPET WITH ENDLESS DE-

43 Kurt Erdmann, *The History of the Early Turkish Carpet*, London, 1977, pp. 25, 62-64. Originally published in German with the title *Der turkische Teppich des 15 Jahrhunderts*, Istanbul, 1957.
44 Page 151.
45 Page 121.

Fish from the Red and yellow carpet with dragons and fishes

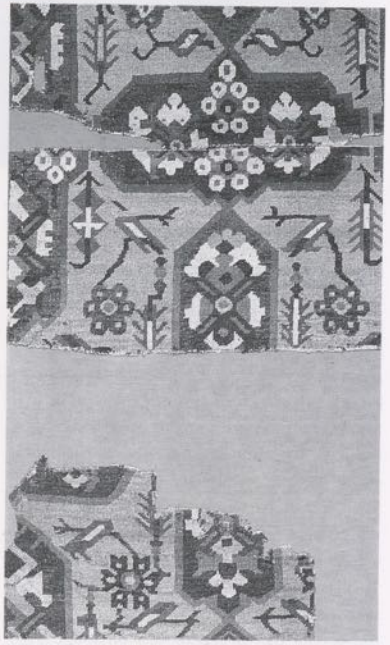


Birds from the Pregnant bird fragment

SIGN OF LEOPARD SPOTS AND CARTOUCHES.[46] The BLUE TIMURID LOTTO WITH RED ANIMALS AND SWANS has animal or zoomorphic forms throughout the field.[47]

In the YELLOW AND BLUE CARPET WITH GRIFFIN AND ARCHAIC BORDER there is a griffin in the white eight-pointed star medallion.[48] In the CARPET WITH HEAD MASKS AND GULS there are horned creatures or head masks at either end.[49] In the PREGNANT BIRD FRAGMENT there are birds throughout the border of the carpet.[50] In the EARLY CARPET WITH SPOTTED LOBES there are

Griffin from the Yellow and blue carpet



Carpet with leopard spots

46 Page 247.
47 Page 217.
48 Page 159.
49 Page 235.
50 Page 237.

Goddess and deer from the Black bordered goddess carpet

stick lions in the field and even the spots themselves are probably descendants of spotted animals.[51] In the RED CARPET WITH TREE OF LIFE AND ANIMALS there are eight birds around the medallion.[52] There are giant parrots in the ARCHAIC ARROWHEAD BLOSSOM CARPET.[53] The RED AND YELLOW CARPET WITH DRAGONS AND FISHES seems to be made of strands of "animal stick stuff" — really dragons surrounding swimming fish.[54] The FLAMING ANIMAL SPIRIT CARPET WITH VULTURES is made of great winged vultures, with animal spirits arising from them.[55]

Animals appear in almost every carpet of the early periods. And the fact that animals appear throughout the carpets of this early era is no accident at all. It is an inevitable consequence of the way that centers — and their being nature — form in the geometry. As centers get created, and as these centers then become more and more intense, the geometry of space in the carpet becomes animated. It is therefore not surprising that we find animals starting to appear throughout the field.

In part 3 I shall show many examples of this animistic space, show how the animals appear in space, why they are important, and describe the way the presence of animals is not merely a cultural accident, or cultural preference — but is an almost inevitable feature of any space where the centers become highly developed.

51 Page 169.
52 Page 143.
53 Page 191.
54 Page 141.
55 Page 173.

CHAPTER 13

THE EMERGENCE OF A BEING

I now present the culmination of the argument. This hinges on an extraordinary phenomenon — closely connected to the nature of wholeness — and fundamental to the character of great Turkish carpet art. It may be explained in a single sentence: *As a carpet begins to be a center* (and thus to contain the densely packed structure of centers which I have described), *then, gradually, the carpet as a whole also begins to take on the nature of a "being."* We may also say that it begins to be a picture of the human soul.

This subject is delicate, because it is not quite clear how to discuss it — not even how to evaluate it — nor even in what field or category to place it. It opens the door to something we can only call "spirit" and to the empirical fact — a fact of psychology if of nothing else — that after all, when a carpet does achieve some greatness, the greatness it achieves seems to lie in the realm of the spirit, not merely in the realm of art.

We cannot ignore this subject, nor leave it out from our discussion. Yet it does inevitably place a burden on the discussion too. Except for the enigmatic statements in chapters 1 and 2, what I have said up until now, in chapters 3-12, is essentially empirical — consistent with observation — and reasonably comfortable in the mental and intellectual setting of twentieth century scientific thought. Here, at last however, with the explicit appearance of "spirit" in the discussion, we enter ground where there is the danger of being foolish — at least, embarrassing — and the possibility that the good sense and careful analysis of the last few chapters, may be somehow spoiled by the introduction of a topic which is not consistent with the world view of science in the late twentieth century. Yet we cannot reasonably avoid it. If I want to give an objective and complete account of the nature of great Turkish carpets, this subject must be faced.

My approach to this subject is at root, empirical again. We have already seen that the organization of any carpet pattern, or any motif within a carpet pattern, can be seen as a complex multiplicity of centers, and that this array of centers is the essential structure of the pattern.

We shall now see how not only the obvious composition of a pattern and its parts can be seen as an array of centers — but that the much more subtle issues of shape and proportion — and ultimately even the so-called spirit which makes its appearance in the carpet — can, also be seen in terms of centers — and that, indeed, when we see them like this, we shall profoundly alter our understanding of their effect.

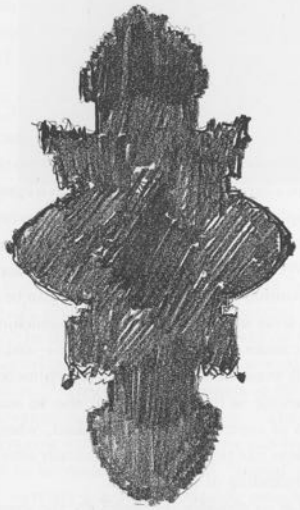
Let us consider, for example, the shape of the field in three carpets with a niche at either end. These three rather similar carpets, all have a field shape — crucial to the carpet design — that may be understood as a medallion made of a niche at either end. They are all in this collection.[56]

Of course, in each of these carpets the field shape is, itself, a "center." This is obvious. What we may now see is that the characteristic shape of each of the three fields, and the feeling

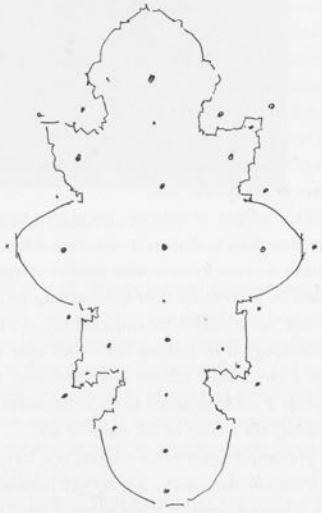
56 See ARCHAIC LOBED MEDALLION CARPET WITH TURTLES IN THE BORDER on page 155, and the Ushak SMALL MEDALLION CARPET WITH SQUARED MIHRABS on page 215 and SMALL MEDALLION CARPET WITH YELLOW BORDER on page 283.

of the shape, is also governed by the complex of smaller centers which are induced in and around the field, and that the beauty of shape itself, and extent of the "being" or spirit which appears in the carpet — what we may also understand as the depth of this major center — depends on the number and density of smaller centers which contribute to the shape.

In the 14th century ARCHAIC LOBED MEDALLION CARPET WITH TURTLES IN THE BORDER from Sarkislar, the most primitive of the three, there is a feeling of an archaic soul produced in the shape alone. This soul, which can be clearly felt, is created by a specific and very complex pattern of centers shown on this page.



Field shape of the Archaic lobed medallion carpet, 14th c.



Centers forming the being of the Archaic lobed medallion
This shape has very many centers

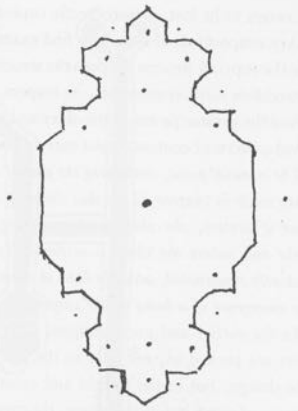
In the 15th century SMALL MEDALLION CARPET WITH SQUARED MIHRABS from Ushak, there is also some degree of "presence" in the shape. It has a regal magnificence — not as spirit-like as the Sarkislar, but still palpable. This is produced by the pattern of centers shown on the next page. The pattern of centers is somewhat less complex than it is in the Sarkislar.

Finally, in the 16th century Ushak SMALL MEDALLION CARPET WITH YELLOW BORDER the shape is rather flaccid. It seems to fall apart, it has less feeling, and less emotional substance. In this case, the pattern of centers, also shown on the opposite page, is substantially diminished. There are really only two or three centers in the shape. The shape has degenerated, and its deep spirit is largely gone.

Thus the earliest and most beautiful of the three examples, has a shape with far greater density of centers than the others. And it is the one in which we feel its spirit most strongly. And between the two lesser Ushak examples both with less centers, the earlier and more beautiful one — the more angular one — has considerably more complex structure of centers.

The evaluation coincides with other evaluations. As a matter of tradition among carpet

15th century Ushak field shape



System of centers: this shape has fewer centers in it

collectors and scholars, the Ushak design which is more angular is *generally* considered to be the greater of these two designs. The shape itself is more profound, it "holds" more. The later one is more decorative, slightly more trivial. We experience this directly, in the emotional force of the drawing. It is interesting to see that the drawing of greater emotional force, also happens to be the one which contains the more complex structure of centers. We thus see how the structure of centers is deeply related to the artistic power of the carpet which is created by these centers.

It is also no accident that the more complex of these two Ushak field shapes is the earlier of the two. Often, as a particular design evolves, changes, from decade to decade, we shall find that the complexity of the centers it contains, decreases. Apparently, as weavers copied, there was a tendency for the more subtle, more com-

16th century Ushak field shape

System of centers: this shape has very few centers in it

plex centers to be lost, or incorrectly copied, so that they evaporated. It is rare to find examples where the copying process deepens the structure, or introduces *extra* symmetries, or centers.

And the greater power of the older and more original pattern of centers, is not merely beautiful. *The essential point, continuing the point I have already made in chapter 12, is that the most dense systems of centers, the oldest and most original, and the ones where the thing is so forcefully and archaically constructed, actually lead in some way to the emergence of a being in the carpet.*

In the earlier and great designs, where the centers are packed in, not only in the intricacy of the design, but in the weight and emotional substance of every individual shape, the carpet in some fashion achieves a greater degree of being. *The density of centers creates a being.* There are apparently certain configurations of centers, certain centers themselves, which have a more profound significance than others, because they somehow give rise to a "being" — which, like an individual human being, is distinct, autonomous — a creation unto itself — and which somehow rises from the dross of its component centers, and becomes magnificent, through the particular organization of the centers from which it is made.

And of course, just as this phenomenon can arise within an individual center — some piece of a carpet — so it can also, arise within a carpet as a whole. A carpet as a whole, can become a being, a powerful autonomous phenomenon in its own right — and it is at this moment that we finally come face to face with something of major importance or value in the work.

Among the three examples I have just examined, the ARCHAIC LOBED MEDALLION CARPET has the greatest degree of being. In other carpets the "being" may be still more dense. Let us once again come back to the SELJUK PRAYER CARPET I have discussed before. Here the density of centers is so great that the being which emerges is

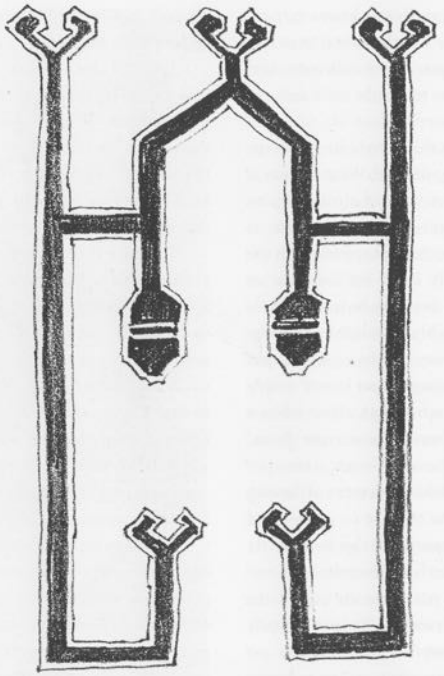
The Seljuk prayer carpet

almost literally human in its appeal and in its force.[57] The carpet has a being in it in a palpable fashion which we experience, and which we confront, when we see the carpet face to face. It is this being which dominates the carpet, and makes it appeal to us.

Essentially it is this emerging being, formed by the centers, and out of centers, which is the goal of every carpet. Those carpets which are most significant in this collection are the ones in which the being comes out most strongly — in which the being dominates. And those minor carpets, which are perhaps not great, but where something of force still speaks to us — are those where there is a hint of some being in the carpet, or in the motifs, or hovering somewhere behind the work of the geometry.

And inevitably, this emerging being has something unique to it — an original force, not

57 Illustration on facing page.



The "being" that appears in the Seljuk prayer carpet

easily duplicated, but like an organism unique, because as a whole it is so coherent that its uniqueness and its personal character arises from the never-repeated highly ordered coordination of the parts.

This uniqueness may be better understood from an informal discussion of a collector's point of view. Many of the carpets in this collection, are literally unique. That is, they seem to be the only examples of their type in the world. This includes, for instance, the SELJUK PRAYER CARPET, the SELJUK GUL CARPET, the COUPLED COLUMN PRAYER RUG WITH EIGHT COLUMNS, the GREEN FIELD "MONGOLIAN" VILLAGE CARPET, the CARPET WITH BLUE LOTUS BLOSSOMS ON GREEN FIELD from Yarkand, the FLAMING ANIMAL SPIRIT CARPET WITH VULTURES, the BYZANTINE-TIMURID PROTOTYPE, the WHITE FIELD SELJUK CARPET WITH INFINITE REPEAT OF DRAGONS and several others. Other carpets in the collection are nearly unique: that is to say, there are similar carpets in existence — but each of the similar known examples appears to be rare and wonderful. None belongs to a known "type." This includes, for instance, the STAR CARPET WITH FLOWERS, the LARGE OCTAGON CARPET, the BLUE TIMURID LOTTO WITH RED ANIMALS AND SWANS, the RED AND YELLOW CARPET WITH DRAGONS AND FISHES, the TWO PANEL CARPET WITH ARROWHEAD STARS, the TRELLIS CARPET, the CARPET WITH ENDLESS REPEAT OF LEOPARD SPOTS AND CARTOUCHES, and the ENDLESS DESIGN WITH STARLIKE MEDALLIONS. All these special carpets — actually unique, or nearly unique — stand out strongly, and give the collec-

tion its force. To a person who knows carpets, these are the most important, the most interesting, the most beautiful carpets in the collection: certainly they are the ones where the wild soul, or being, is most strongly evident.

The question is: Is this merely in-group appeal, or is it something deeper? What I mean is this. From the point of view of a collector, an extremely rare carpet — a carpet which is unique, and has no counterpart anywhere in the world — will inevitably stand out *simply as an object of rarity*. It may therefore be intellectually interesting, it will possibly be valuable in money terms — and it will in any case be a good subject for long discussion among carpet lovers simply because there is so much to talk about when a carpet is unique — where does it come from, what are its possible "cousins" — etc., etc.

Also, there is a childish element of having made a "find" with one of these carpets — as if it were a trophy in a sport. All this is perfectly understandable, and perfectly human.

However, that is not quite the end of the story. The particular "rare" or "unique" carpets in this collection, do impress themselves on one as being especially important in some deeper sense. When I exercise my most balanced judgement and intuition, many of these unique carpets impress me as quite extraordinary — as though they have penetrated to some deeper level of order, and are, honestly, just better, or more beautiful, and more profound — *not* just simply rarer. And this is above all, why I consider them as the core carpets of this collection.

Well, again, one asks, with skepticism: Isn't this the natural attitude of any collector, who, pleased with his rare finds, tries to elevate his feeling for them into something more than just collectors' mania, and thus seeks to justify, or explain the importance of his rare creatures, with some more refined attributes. I remember, when Bud Holland sold me the STAR CARPET WITH FLOWERS,[58] he said: "Well, you'll certainly be the only kid on the block with one of these —" and we both laughed.

Is it just that, or is it something deeper? If it is something deeper, then it certainly needs to be explained. What possible connection could there be — over and above mere collectors' enthusiasm — which might create a correlation between rarity in these old Turkish carpets, and depth of structure or profoundness.

I believe there *is* a connection. Let me express the matter in this way. The deepest carpets, are the ones which possess symmetry structures, structures of centers, of great power, complexity and simplicity. Such a thing cannot be achieved easily. For the artist it is a task of great difficulty, to find a symmetry structure, or a structure of centers, which has the power to "raise" a being — if we want to put it that way.

It can be done, only by paying detailed attention to the uniqueness of a given situation. And it tends *not* to happen, when the weaver is copying, too closely, some known pattern, or some previously worked out design. It happens, more often, where the uniqueness of a particular fragment of a design, takes off, develops, and leads into unknown and unexpected directions.

In other words, the greatest power and depth, comes about under circumstances where the uniqueness of the design is allowed to rule — and where the slight uniqueness that every design starts with, gives way to progressively greater and greater levels of uniqueness, as the centers and symmetries take on more and more meaning, and the configuration develops in character. Of course, this happens under conditions of considerable freedom. It will tend not to happen, when we are copying, too closely, some known pattern, or some previously worked out design. It happens, more often, where the uniqueness of a particular fragment of a design, takes off, develops, and leads into unknown and unexpected directions. We do see it occasionally in the workshop carpets — for instance, it happens in the main border of the 16th century SCARLET AND YELLOW LOTTO CARPET which is unusual, and which creates a uniquely beautiful and syncopated effect around the rather ordinary classic Lotto field.[59] But it happens more often in the carpets which are woven outside the framework of standard designs. And, by definition, of course, it will tend to produce unique *results* when it occurs.

58 Page 213.

Beings in the details of the Byzantine-Timurid prototype

According to this analysis, the unique carpets, are not unique or important, merely because they are older, because others of the same type have not survived — but *because they were unique at the time they were woven*, and there never were many other carpets that developed in this particular direction. Thus the feeling of uniqueness that we experience in one of these carpets is an inner feeling, which comes from the real power, and real force, and real unity of the carpet itself — not from some accident of history which happens to have destroyed all the other examples of the type. These wonderful, and unique carpets, never were members of a type. They were conceived, as they are, uniquely, through the process of someone following the consequences of a particular design inspiration, and following the progression and symmetries and centers which develop from that inspiration.

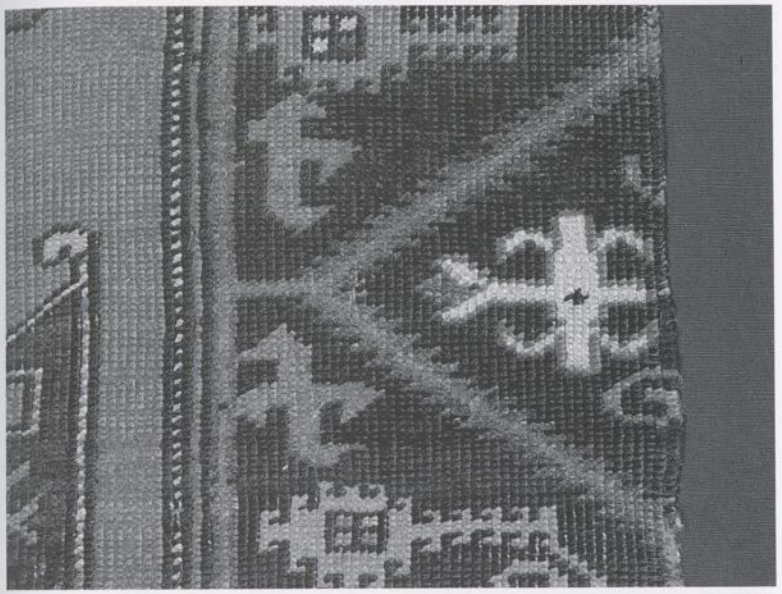
According to this analysis, we shall see the best examples, of any carpet, and the deepest structures, always under the same conditions. That is, we shall see this under conditions where the inner structure of the carpet, or of the design, has governed the process of its making — so that the natural unfolding of the centers and symmetries is what *gives it its structure, what creates its design*.

This means, that even when confronted with rather well-known "types," the best and most profound examples will almost always depart from the type to some extent — because the pattern was not made from a mold, but from the unfolding of the unique opportunities, unique symmetries and centers that began to develop in that design.

So those very rare carpets, which are truly unique, in the sense that no others like them are even known, or in the sense that only one or two comparable examples exist — these carpets are the most precious in the collection, because they are the carpets where this internal process, of

59 Page 245.

Beings in the detail of 14th century Flaming animal spirit carpet with vultures



Beings in the border figures of Black bordered carpet with goddess and deer

allowing centers and symmetries to develop from the emerging structure of the design itself, has happened to the greatest degree. It is in these carpets that the "being nature" has emerged most strongly, and it is in these carpets that the weaver's art has come closest to finding that mirror of the wholeness of the universe, we call the soul.

To end the discussion, I repeat a crucial paragraph from chapter 11. This conception of centers which we have arrived at is so rich, that we can define the *whole* creative task . . . merely by saying: *The essence of the creative task is to create one center*. We do not need to say "many centers" or "a multiplicity of centers," — because the phrase "one center" already contains this idea of many centers implicit within it. *All we need to do, is to try and create one center*.

It is important not to separate the mechanical nature of this task from its spiritual nature. On the one hand it *is* a complex, mechanical task — just as I have described it in the last chapter. On the other, it is also a profound spiritual exercise. For what *is* the effort to create one center in this fashion. It is precisely, the effort to create perfect wholeness. And this, the creation of perfect wholeness — is also the creation of an image of the human soul. Thus the difficulty of this work — its intellectually challenging nature, and the fact that we see clearly just what has to be done in the light of our definition of a center — does not at all diminish the spiritual nature of the task. If anything it elevates it, because it allows us, finally to talk about the spiritual nature of the task, or the task of making an image of the human soul, without hiding it behind other verbal paraphernalia. The task is so clear, and the difficulty of the task also so clear — that we can quite unashamedly talk about its spiritual and mental and emotional side as well. When

this task is actually accomplished, or to the extent that it is well-accomplished, the spiritual content, the religious content, and the emotional content of what is created, then shine out quite clearly.

Thus, we may redefine our task once more, simply by saying that the task of creating a center — of creating unity — is no less, and no more, than the task of creating a concrete geometric image of the human soul.

CHAPTER 14

AFTERWORD: THE KONYA DISTRICT

I wish to finish this introductory essay with a few words about the purely *geometric* character of the carpets which are presented in this collection.

In many of the early writings about carpet studies, even by the most distinguished historians, one comes across statements which make it seem as if the purely geometric carpets, are somehow second-best, inferior copies, of other earlier and greater carpets.

Thus, for instance, Turkish carpets are often presented as second-best cousins of the more floral and realistic Persian carpets of the Safavid era. Agnes Geijer described the great Konya carpets as a second-best copy of some earlier and more realistic Chinese damask.[60] Bode and Kuhnel wrote as if the purely geometric Turkish carpets were somehow degenerate versions of more complex Persian designs.[61] Riefstahl said that the great Konya carpets could not possibly have been the "finest in the world" which Marco Polo describes, since of course these such carpets would have been floral, or more realistic.[62] In short, the carpets of the geometric tradition, which is the subject of this book, used to be treated as second cousins of more realistic carpet designs that might have disappeared.

I hope that it is clear from the discussions of the previous chapters, that this attitude — already disappearing among the majority of contemporary scholars — thoroughly misrepresents the essence of the art of carpet weaving. In fact the greatest and earliest traditions of textile art all occupy themselves with precisely that geometric problem which appears throughout the carpets in this book — *the creation of profound, even spiritual space, purely from the interplay of forms*, and the creation of form, in which form alone, form, geometry, and color, produce feelings, the identification of wholeness or a being, and the close connection with the human self.

McMullan took a step in this direction, when he made the decision to present a considerable number of Turkish village carpets, and to avoid the popular but standard presentation of "classic" Turkish prayer carpets. He recognized that in his village carpets, there was a tradition of *greater* depth, greater power, and of greater importance, than had been clear before his writing. However, many of the Turkish village carpets in McMullan's collection are 19th century carpets — which really lie at the tail end of the great tradition. The deeper part of the tradition, though represented by a few of his carpets, such as #80,[63] was not systematically presented or even hardly mentioned in his work. Indeed, it was only with the publication of Yetkin's *Historical Turkish Carpets*, in 1974, that the enormous wealth and fundamentally different character of the earliest Turkish carpets first became widely known to the western world.[64]

It is this pure Turkish tradition, which is the greatest, deepest, and most geometric of all. This is the core of carpet art. It is, in the world of carpets, what the work of Bach and Monteverdi is in the world of music — a realm of pure structure, in which the deepest human emotions have their play. It is very important to understand that the earliest carpet tradition *had its play in just this realm*. The carpets of the Timurid era, the great Seljuk carpets, the great Mongolian carpets of China, the greatest and earliest Spanish carpets — all these deal precisely with the realm of pure structure, pure geometry, pure color, which later became the basis of Turkish carpet art. It is only we in our post-Victorian love of realism, who have sometimes been unable to see how purely abstract compositions can have the kind of greatness of profound art, who have mistaken these great carpets for second cousins of the more floral, more courtly traditions. In fact it is precisely the *geometric* carpets inspired by Seljuk art, by Timurid art, and by Mongolian art, which, at the beginning of the second millennium, brought the art of the carpet to its highest pinnacle.

One final word about place of origin. Many of the carpets in this collection come from the Konya district at the heart of Central Anatolia — either from nearby villages such as Karapinar or from the town of Konya itself. I believe this subject is worth discussing for an essential reason. Konya was the home and is the resting place of Mevlana — Jalaluddin Rumi — the great Sufi saint, whose remains are still enshrined in the Turbe of Mevlana. Many of the Konya carpets do seem to have more of the mysterious spiritual beauty which I have tried to describe in these pages — and I believe that this quality, came about in carpets, precisely in this part of Turkey — because it was just in this region, that Sufism was praeticed with the greatest intensity.

It is my contention that the weavers of the greatest and most spiritual carpets which this book discusses, were weaving within the mental and emotional framework of Sufism. I believe (though there is not yet any direct evidence) that the greatest carpets were probably woven in Sufi tekkes where Sufism was taught, and that carpet weaving, like calligraphy, book making, painting, and other arts, was undertaken as part of the Sufi's quest for union with God.[65]

In the same period when Mevlana lived, Konya was also the center of the great Turkish Seljuk empire — the source and origin of almost everything in Turkish carpet art.[66] Although there has been an increase in our understanding of the role played by the Seljuk inspiration, our mental attitude to Turkish art is still sometimes dominated by the floral designs of the Ottoman empire. Yet in my opinion, the carpets which are truly great, are not those that get their substance from these floral ideas — but from the earlier and deeper substance of the Seljuk inspiration. Just what this Seljuk inspiration was, has also not been clear — so that the two main streams of

60 Agnes Geijer, *A History of Textile Art*, Stockholm, 1979, p. 186, figs. 3 and 4.
61 Bode and Kuhnel, *Antique Rugs*, pp. 169–175.
62 Rudolf M. Riefstahl, "Primitive Rugs of the "Konya" Type in the Mosque of Beyshehir," Chicago, 1931, pp. 15-22.
63 McMullan, page 256.
64 Serare Yetkin, *Turk Hali Sanati*, Istanbul, 1974. English edition, *Historical Turkish Carpets*, Istanbul, 1981.
65 Davina Waterhouse has pointed out to me that my assertion of the Sufic origin of the most spiritual carpets is likely to be highly controversial, since many carpets were woven by women, while Sufis are generally thought to have been men. However, women were strongly engaged in the active practice of Sufism, and were specifically encouraged as Sufis by Mevlana himself. The fact that women were deeply engaged in the practice of Sufism is rather fully discussed by Annemarie Schimmel, *Mystical Dimensions of Islam*, The University of North Carolina Press, 1975. See appendix 2, "The Feminine Element in Sufism."
66 Mevlana lived 1207-1273. The Seljuks of Rum ruled Anatolia 1077-1307.

artistic and religious inspiration which formed the great Turkish carpets — the Seljuk empire, and the spiritual work of the Sufis — are both still mainly hidden from us.

In short, although the carpets which were woven in other parts of Turkey were often very beautiful, it is possible that those in which the weaver was most clearly trying to imprint them with his spirit, would occur exactly in the Konya area — because it was just here, in Central Anatolia, that the tradition of Sufism had the greatest intensity.

If so, and if the carpets which are illustrated in this book, do come mainly from that tradition which was formed in Konya about the time of Mevlana — then the importance of these carpets, and of other comparable carpets preserved in the Turk ve Islam and Vakiflar Museums, does not only lie in their great and special beauty — but lies, ultimately, in the fact that they penetrate deeper into the human soul, than other carpets do — and that their special worth is spiritual and religious — not only aesthetic.

Once we have learned to see art — and carpet art especially — in this way, then we can begin to use a far tougher sense of discrimination, in deciding where this has happened and where it has not. We can recognize, for instance, that a typical Turkoman carpet, beautiful as it may be in a sensuous way, simply contains very little of this kind of structure. The Kazaks, Yomuds, Shirvans and Bergamas, the staples of 18th and 19th century carpet art, just do not contain very much of this kind of structure. Nor indeed, do the more highly prized versions of the same period: the Salors, Ersaris, Moghans, even Konyas of the 19th century. These kinds of carpets perhaps vaguely approach the realm which I am discussing — but they fall far short of the truly surprising, and deep power, which exists in the oldest, and most archaic Turkish carpets. That is another world entirely, where the centers that have been created, are then the sole substance that has been created, the sole reason for the making of the carpet — and the pinnacle of what has been achieved.

Connected with this issue, there is still one more strand of argument. In the last years attention of carpet scholars has begun to focus on James Mellaart's archeological excavation of the Catal Huyuk site, about 50 miles south-east of Konya.[67] This site, with remains and wall paintings going back to 5000 and 6000 BC, has astonished scholars because it seems (proof is far from conclusive) that kilims of that time, more than 7000 years ago, were similar in design, to those woven in the last few hundred years. This would imply the existence of an unbroken artistic tradition more than 7000 years old — something which, as far as we know, has not existed anywhere else in the world.

Perhaps even more important, it suggests a source of artistic inspiration, which is not Moorish, not Christian, not Islamic, not Seljuk — but *simply Central Anatolian*. It indicates that Central Anatolia of all places, has a fountain of artistic shape and form and color, dating back to prehistory, and not dependent on any other better-known artistic source. This fountain, this well-spring, would then be of extraordinary importance among the source of motifs in the world of art — of central importance in the world's history, and, perhaps, of greater importance, than the traditions like the Islamic one, which we know so well. If so, it would seem then, that the importance of Konya, the Sufic inspiration which existed at the time of Mevlana and which formed many of the beautiful carpets illustrated in this book, is itself merely the grandchild of an older, and more important tradition, dating back to the very early days of man.

67 For example, Mellaart, Hirsch and Balpinar, *Goddess*; Cassin, *Image Idol Symbol*; and Balpinar and Hirsch, *Vakiflar Flatweaves*.

PART TWO

DATING AND PROGRESSION OF EARLY CARPETS

My main aim in this book is to explain by example how the phenomenon of oneness, or unity, is actually constructed in different carpets. This is my main task, since it is my hope that readers of this book, will not only understand the concept of unity in an art-historical sense — but will understand it concretely enough *so that they themselves can actually create it*. I am thus hoping that the reader who is an artist or a builder will be helped by these carpets, as I have been helped, and will therefore be able to improve his own art by studying them.

I also hope to show that, by and large, the earliest carpets are the best. This comes about simply from the fact that the greatest religious periods were a very long time ago. During those periods people had a very concrete and realistic idea of unity, and how to produce it. But the further we came from the high religious periods, the more distorted and watered-down, the real understanding of unity became. So the later the carpets are, the more we find carpets which are mechanical copies of older carpets but which no longer have this deeper unity in them.

I am not expressing a romantic feeling, here, that something is good just because it is old. It simply happens that the great religious period was a very long time ago, and that the period in-between has been much more dilute in its understanding of unity. *If, as I believe, we are once again on the verge of a great religious period, then we may soon see the artifacts of the 21st or 22nd centuries once again containing true unity in its deepest form. At that stage, it will be clear that the phenomenon of unity, is simply a structural fact — and has nothing to do with historical age or with being old.*

Within the framework of this view, dates are rather important. The carpets which I regard as important, happen in many cases to be among the very oldest which exist — not because age is by itself important, but because the earlier carpets have more complex, more powerful, and more profound symmetry structures contained within them.

This has come about for a very simple reason. I said in chapter 1, that to some degree every carpet is a picture of God. The depth with which a weaver tries to make a picture of God depends, of course, on the intensity with which that idea, and that aspiration, was felt to be important. This depends on a view of religion in which the person, or being, is identified with the world — a view of things in which a person's self was seen as a part of one great undivided whole — in which the person's main aim was to identify himself with that great One — and in which it was understood that the world is a place where space and matter have life in them — as much in stones, or rocks, or wool, as in a spider or an apple or a person. In such a view of the world, and in this view of God, the idea that a carpet is a consciously created picture of God, or picture of the universe, is natural. But the depth of the picture, the depth of the experience which the weaver relies on to be able to weave such a thing, still depends directly on the intensity with which this view is held.

Since there has been a more or less steady decline in the intensity of this view over the last millennium, the art of carpet weaving has been accompanied, too, by a steady decline in the extent to which the carpets could be pictures of God. The spirit-centered view which I am talking about was at its greatest height, perhaps, in the Bronze Age — the age that created the great Chinese bronzes of the Shang dynasty. More recently this view was widely shared in the great religious millennium when Buddhism, Christianity and Islam all appeared. It reached some kind of high intensity throughout the world in the age of the Christian and Sufi mystics — about the 13th century. After that the feeling declined steadily. By the 18th century there was virtually nothing left of it at all.

It is in the context of this decline that the dating of the carpets is important.

Some writers who are mainly concerned with dates, will no doubt argue about the dates

I have ascribed to certain carpets. They may be right. I have had neither the time nor the facility as a scholar, to be sure, or to bring forward unshakable empirical evidence for the datings I have given.

On the other hand, during the last twenty years I have perhaps handled more very early Turkish carpets, than most people except the Istanbul curators and two or three western dealers. As a result an intuitive and instinctive feel has developed in my eyes and hands, that is similar to the gut feel of a practiced geologist or paleontologist who can "tell" by feel, the age of certain rocks or fossils.

I have no doubt that the broad sequence of the carpets presented in the book is correct. I believe, also, that the empirical evidence for specific dating to individual centuries stands with me. But for any reader who questions the detailed dating I have given here, I can only say that the issue seems open to me — and hope that he or she will not let it obscure the more important questions of sequence and quality, and the relationship of quality to sequence.

Documents and inventories show clearly that from the 12th century to the 15th century, and before, carpets were being made and used throughout Europe and the Middle East. Such inventories exist in Japan, Italy, Jerusalem, Germany, England, France, Spain, Turkey — and in Arabic and Tibetan documents that are only now being studied.[1]

Although these inventories do not show pictures of the carpets, they do, in many cases, give extensive verbal accounts which describe colors, designs, sizes, textures. For example, there are abundant records of prayer rugs in Jerusalem; there are carpets with wheels or octagons; there are carpets which are green with leaf designs; there are carpets with red borders showing leaves; there are carpets showing chessboard designs and chessboard designs with stars.

Recent traditions of scholarship have been reluctant to face the obvious possibility that the carpets they describe are concretely related to actual carpets known to us. Indeed, the body of carpets we know physically, and the body of carpets described in this abundant literature have, so far, been treated by scholars as if they fall in two almost entirely different categories.

However, I am fairly certain that many of the earliest carpets still extant correspond directly to types of carpets included in these inventories. For example, I see no reason why the "chessboard carpets with stars" that appear in inventories are not the chessboard carpets known to us.[2] I see no reason why the "green carpets with leaves" might not have included carpets similar to the GREEN CARPET WITH LEAVES of this collection. It seems virtually certain that the "carpets with wheels" must correspond to the early octagon carpets. There is no reason to think that the carpets with birds and animals that appeared in inventories again and again throughout these centuries were any different from the actual carpets with animals which occur throughout the known collections.

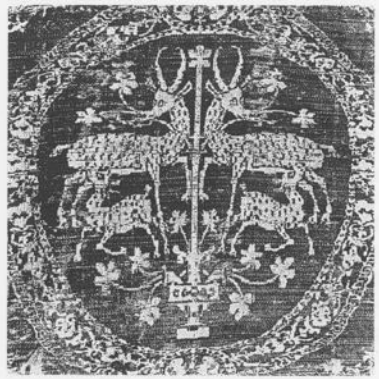
In short, and briefly put, I believe the carpets known to exist in the 13th, 14th and 15th centuries do indeed correspond to a variety of still existing carpets known to us. Many — not just a handful — of the carpets made in these early centuries still exist today. This idea is not only plausible. I believe that it is probable.

Yet this statement is to some degree at odds with prevailing ideas about scholarship, and therefore requires explanation. In recent years there has been a widespread wave of "updating" among carpet specialists. Partly, in order to protect collectors from the overly romantic sweet talk of dealers who want to sell twentieth century

1 Some of these documents are presented or described, in twenty-two papers contained in Volume 2 of *Oriental Carpet and Textile Studies*, edited Robert Pinner and Walter B. Denny, London, 1986.

2 Like, for instance, the CHESSBOARD CARPET WITH GIANT OCTAGON, page 243.

Vakiflar carpet of what century?



6-7th century Egyptian silk

carpets as nineteenth, nineteenth as eighteenth, and so on, various authors have, in the last few years, taken a rather "strict" line with regard to the dating of carpets. This is no doubt valuable. However, it has a negative side, too. For instance, when we see a true 17th century Ghiordes (not one of the later crimson and cotton versions) dated in authoritative books as 19th century, I believe this comes more from the author's desire to show caution, than because of any serious empirical facts which could support such a view. In the case of truly early carpets — especially the carpets of the great Turkish tradition — there is an attitude of this type, which has crept into carpet scholarship too. In the past, various carpet authors — Erdmann, Bode, and others — trying to be accurate, made statements about dates which defy all logic — and which have nevertheless become part of accepted carpet theory.

It is the purpose of this essay to point out some of the misunderstandings involved, and, I hope, thereby to modify and influence the dating of early carpets, by a slightly more empirical attitude.

I can dramatize my attitude to dating, with the following comparison. The Vakiflar Museum has an important and often discussed carpet showing two octagons, each with a pair of animals in it.[3] Yetkin dates this carpet to the end of the 15th century. In a more recent book[4] another reliable authority claims that this carpet was woven in the 17th century.

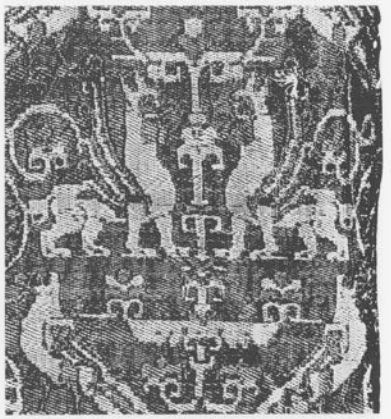
By pure chance, I recently saw a very similar Egyptian silk cloth, considered to have been made in the 6th or 7th century AD.[5]

I believe there can be little real doubt that the one is derived from the other: the carpet from the silk. When we look at them side by side, it is clear that the organization, feeling, and idea, are the same in both, all the way to the details.

It is unlikely, I believe, that there can be nine centuries between these two artifacts. Of course, it is always possible, that the weaver of the carpet had an example of the Egyptian silk in front of him, and became inspired by it. But most often these works are made within a tradition, not by individual inspiration and brainstorming or copying. Further, there is a very well-defined period

3 Serare Yetkin, *Historical Turkish Carpets*, Istanbul, English version, 1981, Pl. 17.
4 Belkis Balpinar and Udo Hirsch, *Carpets of the Vakiflar Museum Istanbul*, West Germany, 1988, p. 62 and pp. 190-1.
5 Adele Weibel, *Two Thousand Years of Textiles*, New York, 1952, Pl. 46, silk twill.

Buyid cloth, 10-11th century



Syrian twill, 8-9th century

when paired and opposed animals appeared in textiles. We find it repeatedly, throughout the Middle East, from the 6th century to the 11th century. *But to my knowledge, in all of textile art there is no example of this design — the pair of opposed animals inside a roundel — being made after the 11th century.* Why then do we assume that the carpet, with obviously similar organization "must" be from the 15th century. Or from the 17th century. The reasonable assumption, based simply on the existence of this motif in textiles of the Middle East, is that the carpet too, came from the period 6th century to 11th century.

If someone were to ascribe an 11th century date to the Vakiflar carpet, contemporary scholarship would declare him more or less a madman. Yet a rational examination of these facts would imply that the Turkish carpet, although more angular and more stylized, must have been made within one or two centuries of the Egyptian silk: We would then arrive at a *latest* date of 13th century for the Vakiflar animal carpet.

Examples like this occur frequently. I do not know any real reasons — beyond preconception, which will tell us, for sure, that this carpet

Buyid cloth, 11th century

was not woven in the 11th century.

In any case, I no longer believe that we can readily go on assuming that all carpets were made in the 17th, 18th and 19th centuries. The Shosoin collection of textiles, created in the 8th century AD, still exists in Nara.[6] Thus textiles, when understood to be important by their mak-

6 See for instance, Ryoichi Hayashi, *The Silk Road and the Shoso-in*, Tokyo and New York, 1975.

ers, or by their early owners, can have a life of many centuries, even of thousands of years. In this spirit, I shall now try to re-evaluate the actual date of many important early Turkish carpets.

In one of Erdmann's most famous books,[7] he spends 100 pages speculating, reconstructing, trying to define the elusive Turkish carpet production of the 15th century. The book begins with the famous 13th and 14th century Konya fragments — then describes the well-known Turkish carpets of the 16th and 17th centuries — and then laments the gap between the two, and tries to define what carpets might possibly have been woven in the interim, in a way that would form a plausible link, in tradition, between the very different carpets of the two eras on either side of the 15th century.

All in all, Erdmann shows about a dozen carpets or pictures of carpets that he believes date certainly from the 15th century. And the tradition of carpet scholarship has followed Erdmann, in that Turkish carpets are rarely or almost never given a fifteenth century date. Until recently, some unspoken rule had created circumstances where, in practice, the earliest date ever given to Turkish carpets — except to the Fostat fragments and Seljuk carpets — was 16th century. In the last five years this has begun to change. As a result of recent discoveries in Turkey, and the appearance of earlier archaic carpets in the west, more and more carpets are now recognized as 15th century or earlier. Nevertheless, even now, we have the remnant of an accepted historical tradition, in which all the classical carpets were considered as coming from the 16th century or later.

Yet consider the fact that a record in the town of Brasov (where the famous church still contains more than a hundred so-called Transylvanian carpets) shows that in the year 1503, between the 7th of January and the 16th of November *more than 500 carpets and rugs were imported into Brasov from Turkey*.[8] Even if it was a commercial shipment, there is no special reason to think that these imported carpets were brand new at the time they left Turkey — any more than the carpets which leave Turkey today are brand new. Rather they tend to be 5, 10, 20, 30 years old. *It is therefore reasonable to assume that a large majority of the carpets imported into Brasov, in that one shipment which happens to be recorded were fifteenth century carpets.*

Where are these carpets?

The church at Brasov, like other churches, palaces and estates in Hungary and Romania, is filled with the carpets we have come to call Transylvanian carpets and classical Turkish carpets. Among these carpets, the white field carpets, Lottos and Holbeins, often tend to be dated to the 16th century;[9] the other typical format Transylvanian carpets tend to be dated to the 17th century.

Are we to assume that in a town like Brasov, where these carpets were evidently prized, all the 15th century carpets have disappeared.

Of the special class of elusive 15th century carpets, mysteriously undefined by Erdmann, and hinted at in the carpet remains now in the Turk ve Islam and Vakiflar Museums, not a single piece remains in Brasov.

Are we to assume then that all the 15th century carpets originally transported to Brasov, were then lost, damaged, destroyed — so that virtually no trace remains — while at the very same time there is an archival collection of Transylvanian carpets in this church, which is without equal, but all dating from the 16th and 17th centuries. Is it reasonable to suppose that a people, so passionately in love with Turkish carpets, as the people around Brasov evidently were, so mindful of their value, so careful of their quality — will have destroyed, or allowed to be destroyed, all of the most valuable, 15th century carpets — and at the same time carefully protected, and preserved all the 16th and 17th century carpets which they could possibly retain.

This seems fantastic.

If we take an objective position, closing our eyes to the bias of present-day carpet scholarship, and bearing in mind the facts which I have just described, does it not seem far more reasonable to suppose that some of the carpets we have classified as 16th and 17th carpets, were instead, quite probably, woven in the 15th and 16th centuries. Then, the mysterious shipment of carpets that came in 1503 was simply made up of those oldest carpets, which still fill the church at Brasov.

Heretical as it may seem, this simple explanation completely explains the mysterious mismatch in dating. It would then seem that the 500 carpets which were brought into Brasov in the great shipment of 1503, were carpets of the type we now date as 16th century — small medallion Ushaks, Lottos, Holbeins, bird carpets — and probably, also some of the earliest of the main line Transylvanian type.

In essence this one observation, opens the door on the strong probability that many classical Turkish carpets, were woven at least 100 years earlier than we normally date them.

According to this change of view, we would then date the oldest bird carpets as 15th century, the small medallion two-niche Ushaks (again the oldest ones) as 15th century; some of the small pattern Holbein carpets perhaps as 14th century; the earliest Lottos as 15th century.

This line of argument then also implies something further. It means that the class of carpets which are clearly recognizable as still older, still more archaic than the classical Turkish carpets — the famous white field saph of the Turk ve Islam, for instance, the SELJUK PRAYER CARPET of this collection, the Karapinars of this collection, the great medallion fragment which is Plate 80 of the McMullan collection[10] — all these must be still earlier — thus not 15th century, in the case of the white field saph, but 13th or 14th; not 14th century for the animal carpets but 10th, 11th or 12th.

In short, this simple argument pushes back every one of the great old Turkish carpets further into the past, and for every one of them suggests a date one or two centuries earlier than the dates we have recently been accustomed to use.

By itself, the one observation about the Brasov carpets, would hardly be a sufficient ground for making a major change in our way of thinking about the dates of early carpets.

However, as it happens, there is a wealth of other reasons, all leading in the same direction, all suggesting that many early carpets, must be far earlier than we have always supposed. The Brasov example merely illustrates a general point, which must be made, I believe, in stronger terms.

At the heart of almost all dating procedures, in the case of early Turkish carpets, lies the use of paintings. However, the use of paintings as sources of information about dates, has one quite remarkable peculiarity. The date you actually get from a painting is a "terminus ante quem." That means only that "the carpet must have been woven some time before this date." But they have been treated as the *most likely date of manufacture*. This simple error, has created a systematic error of at least 100 years and maybe 200 years into all dating from paintings. In the past carpets were valued even more than they are today, not less. Many of the carpets which existed at any given time were old. And like today,

7 Kurt Erdmann, *The History of the Early Turkish Carpet*, translated from the German by Robert Pinner, London, 1977, originally published in German with the title *The Fifteenth Century Turkish Carpet*.

8 This fact is recorded by Marino Dall'Oglio in Gyula Vegh and Karoly Layer, *Turkish Rugs in Transylvania*, eds. Marino and Clara Dall'Oglio, Fishguard, 1977, p. 10. Details of the original source are given in Ferenc Batari, "Turkish Rugs in Hungary," in *Hali*, Vol. 3, No. 2, p. 86.

9 With the exception of Franses and Stanger whose articles in *Hali* have done much to establish the 15th century origin of many of these pieces.

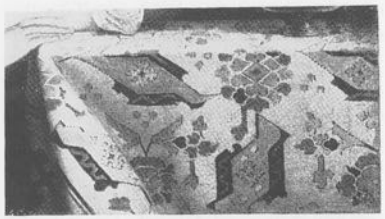
10 Joseph McMullan, *Islamic Carpets*, New York 1965, p. 256.

the oldest were often the most valued. Further, the carpets in churches, on church altars, were preserved better than most. Many carpets were never even put on floors. Those carpets which were treasured, and used in paintings would have been, on average anywhere from 50 to 200 years old — just as they are today.

The same is true of inventories. When we have an inventory which shows something identifiable as a medallion Ushak, we must remember that it is an *inventory* — that means, a list of old and preexisting treasures, inventoried *today*. Just because a mamluk carpet appears in a Venetian inventory of 1790, we do not assume that it is an 18th century carpet.[11] In the case of the Venetian mamluk, the same carpet also appears in earlier inventories going back two hundred years before. A better rule of thumb to use, for a carpet in an inventory or a painting, is to assume that it is 100 or 200 years old, at the date shown. That is my base assumption.

Consider the case of Bode and Kuhnel, writing about the design of the white field bird carpets.[12] "... its time of origin is provided for us through its incidence in paintings by Varotari in the gallery of the Hermitage (about 1625) and in the art trade, as well as in a painted ceiling by Peter Candid in the royal palace at Munich (1587); accordingly we will fix the fabrication of this type at some time between the middle of the 16th and the middle of the 17th century (sic)." This doesn't make any practical sense at all. The 1587 date on a painting of a mainstream (non-degenerate) bird carpet proves that these carpets were made in the 16th century, not that they were made in the 17th, and allows a strong possibility that they could have been made in the 15th.

Or again, the case of Star Ushaks. There is the famous painting of the Doge of Venice with a Star Ushak on the steps leading to his throne. The painting was painted in the year 1534. Erdmann draws the conclusion:[13] "...The Ring of the Doge ... was painted in the middle of the sixteenth century. The different forms of the Ushak carpet were therefore fully developed by 1550." This is true. But the hidden implication — namely that the Star Ushak carpets were not woven *until* about 1550, is definitely *not* necessarily true. Is it really probable that the Doge of Venice rested his feet on a brand new carpet. Would the king of a country today rest his feet on a brand new Dobag carpet. Probably not. Why then should we believe that the Doge of Venice did it. The chances are that the carpet was at least 100 years old when it was painted. If so, the Star Ushak would be a 15th century carpet. Even if it were only 34 years old when painted, it would still be a 15th century carpet. My dating is conservative by comparison.



What must be a 16th century carpet painted in 1625

The Ring of the Doge, painted 1534

11 Giovanni Curatola, "Four Carpets in Venice," Pinner and Denny, eds., *Studies II*, p. 129.
12 Bode/Kuhnel, *Antique Rugs*, p. 51.
13 Erdmann, *History*, p. 70.

Madonna and Child by Jaume Huguet, showing animal carpet

Enlargement of the crown

The same mistake, is repeated, I believe, in Erdmann's analysis of Turkish animal carpets. Here we have a number of paintings from the 14th and 15th centuries which show pictures of paired animal carpets. Once again, Erdmann, and others, following Erdmann, have assumed that the animal carpets are mainly 15th century.

However, many of these paintings are religious paintings; more than a few are paintings of the Madonna and Child. It is perfectly natural to suppose that the painter would have put the rarest and most treasured carpets into such a painting — so that it is quite possible that the carpets shown in these paintings were 300 to 500 years old *at the time they were painted*. This would place these carpets in the 9th, 10th and 11th centuries — a dating far more consistent with the appearance of the two-bird design in early Byzantine textiles.

Of course this is all debatable. But since it is debatable, scientific caution would tell us to pick the minimum hypothesis consistent with the facts. In this case, the minimum hypothesis would say that the carpets were woven at the same time as the Byzantine textiles which they closely resemble.

In order to emphasize, as graphically as possible, the far-fetched aspect of dating a carpet according to the date of the paintings in which it appears, let us consider the Madonna and Child with Saints painted by Jaume Huguet, 1456, now hanging in Barcelona.[14]

In this painting the Virgin is wearing a crown. If we were to use Erdmann's method of dating for this crown, we would have to assume that the crown too, is a type made in the 15th century. Yet this crown, with the elongated crosses, and very ancient simplicity, is a type probably made in the 11th century — at any rate no later than the 12th or 13th. Thus, *for the crown*, Erdmann's dating procedure would be ludicrous.

In fact of course, the crown shown in the picture is a type (or an actual one) very much

14 Reproduced M.S. Dimand and Jean Mailey, *Oriental Rugs in The Metropolitan Museum of Art*, New York, 1973, fig. 145.

treasured, known to be ancient, *and chosen for exactly that reason by the painter*.

Is it not most probable to assume that the painter would have done exactly the same with the carpet, that he did with the crown. That is, he would have picked the oldest, most treasured, most wonderful carpet known to him, as one fit, and appropriate to his painting of the Madonna. It is hardly likely that he would have chosen a recent import from Turkey — as Erdmann would like us to believe — any more than he would have chosen a recently made crown instead of the most beautiful he could find.

Looked at from this point of view, the best guess date for the animal carpet with animals shown in the painting would be 11th century, a date far more consistent with the dates of similar animal designs in textiles.

Dating according to degeneration of complex symmetries leads to a similar conclusion. The tradition of carpet scholarship has it that the floral forms of designs were usually the early ones, and that the more abstract or "schematized" versions then followed, in later periods, as the delicacy of the floral workshop work, gave way to cruder village copies. One of the leading proponents of this view has been Charles Grant Ellis.[15] For example, Ellis ascribes one of the most important 16th century carpets of the Philadelphia collection to the 18th century.[16]

Although this "village degeneracy of classical types" may have occurred in certain instances, this assumption, contains in dangerous form, the whole misunderstanding about early Seljuk art, encapsulated in a single principle. It assumes that realism had more appeal in early eras (as it did in Victorian England) — and completely fails to recognize the power of abstract forms to represent the soul, or to achieve the mirror of the self property that I have described earlier in this book.

Because of this biased orientation, the same tradition of carpet scholarship has also failed to notice that in many cases, the so called "transition" from floral design to abstract design, actually *gains* structure: that indeed, the abstract forms very often contain far more complex symmetry structures, which are much more capable of achieving the "mirror of the self" — and that these complex symmetry structures are missing (in fact *lost*) in the floral versions of the designs, which, in my view, in many important cases come later than the more abstract forms.

One of the most common assumptions about dating, is that floral and highly realistic and complex designs, degenerate into "simpler" designs.

16th century carpet dated 18th century by Ellis

15 Charles Grant Ellis, *Oriental Carpets in the Philadelphia Museum of Art*, Philadelphia, 1988.
16 *Ibid.*, Pl. 36, p. 108.

Konya prayer rug with eight columns, 16th century

Coupled column Ladik, 17th century

It seems to me that this kind of argument is often faulty. We assume that realism, was the high point of the carpet weavers' art; thus the less realistic, more schematic design seems more degenerate to us. But if we realize that the weaver was, instead, simply trying to produce an intricate structure of oneness, in which symmetries overlap and interlock in the way that I have tried to describe in chapters 1-13 — then, we may also recognize, that the highest art is the one in which the structure of symmetries is most beautiful, and often most complex while the degenerate art may be identified by a loss of symmetry structure, by a degeneracy in the structure which the weavers themselves were trying to produce.

Under these circumstances, a design that seems more intricate or more realistic may, if it contains less symmetries, be a later design; while the bold "geometric" design — if it contains more symmetries is quite likely to be the earlier design.

To study an example of this kind of possible misunderstanding, let us compare two prayer rugs from my collection which both have the curvilinear cartouche border: the COUPLED COLUMN PRAYER RUG WITH EIGHT COLUMNS from Konya and a rather ordinary coupled column Ladik.[17]

According to conventional dating, the Ladik would be considered an elegant, though degenerate 17th century carpet; while the Konya or "village rug" as it would be thought of by some

Archaic Konya version of cartouche contains more well-formed and powerful centers

More recent Ladik version contains few well-formed or really powerful centers

17 Konya on page 241, Ladik not shown in part 3.

people, would be called a late 18th century village variant of the classical tradition.

My belief is that the Ladik really is a 17th century degenerate classical carpet, while the Konya is a 16th century piece, of greater age, greater importance, and far greater artistic depth.

This belief can be verified by examining the structure of centers and local symmetries in the two designs. For the sake of brevity, just compare the cartouches in the two carpets. When we examine the Konya version of the cartouche, we see that the powerful small hexagons at the outer sides, left and right, are flanked by triangles, or bird-like shapes, of lighter color, which themselves still have strong enough shape to exist as independent centers. In the Ladik version, these powerful designs have degenerated into a vague swirl of curvilinear shapes — but the local symmetries corresponding to the two hexagons no longer exist. A similar comparison shows the difference between the tulips in the cartouche. The centers and symmetries the tulips produce are broadly similar in the two cases. However, the Konya tulips are more powerful. They are placed within the shape of the cartouche in such a way as to create a strong shape between the tulips (in the middle); a strong shape between the two tulips that are separated vertically; and a strong shape above the upper tulips, and below the lower ones, in the quadrants that they define. These strong shapes, visible, in the black of the Konya version, define their own centers and local symmetries. In the Ladik version, the counterpart of this strongly formed space is entirely missing. There are no symmetries created by the tulip, beyond the tulip itself — as a result the Ladik weaver has lost almost 80% of the local symmetries associated with the tulip in the Konya version.

We are intuitively aware that the Konya version is more powerful. However, because of a preconception many people would consider the Konya version a powerful "village" piece, and completely fail to recognize that it is a far more sophisticated work of art, a structure resplendent with centers and symmetries — while the Ladik version is a pale, mis-drawn and degenerate version, drawn by a weaver so far removed from the tradition of the Konya, that he (or she) can no longer even see the symmetries which he is trying to make, and makes only the feeble attempt to recreate a few of them. The difference is big enough between the two, that I believe that the Konya must precede the Ladik by at least 100 years — hence my assertion that the Konya is a 16th century piece.

I repeat. It is only our preconception, created by a tradition of romantic realistic art, which makes us believe that the more floral, more ornate of the two, is the earlier, or the original. We make this mistake, because we think that it is *representation* which is the essence of the weaver's art — and do not realize that it is, instead, the structure of symmetries which bind space together. One might just as well claim that Monteverdi must come after Liszt, because it is so abstract, and because Liszt is so realistic. It is the Monteverdi which is great, because it deals with *structure*; and it is the Konya which is great, because it also deals with *structure*.

To make this principle more clear, I shall now discuss the comments which Agnes Geijer made on the dating of one of the famous Konya Seljuk carpets, in relation to a comparable, but more realistic Chinese silk.[18] Geijer claims that the Chinese silk is of the 14th century, and implies that since it is more realistic of the two, the Konya carpet must "certainly" have been copied from it, and therefore woven later.[19]

However, if we examine the two designs which she illustrates, we see that the Konya version of the design, contains a far more complex structure of symmetries. For instance, the dark ground between the light motifs, has its own

18 Geijer, *Textile Art*, p. 186, figs. 3 and 4.
19 See *Ibid.*, p. 186.

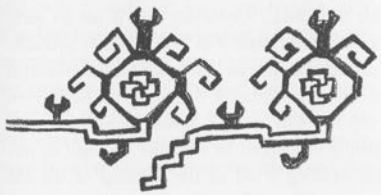
pronounced shape, which itself forms a center. There is a relation between the stepped tails which alternate vertically, thus also producing a system of alternating centers in that direction. The latchhooks which surround the main motif are themselves so carefully drawn, that they contain a double system of spiral centers within themselves. And the C-wrench head on the motif, which also appears in the SELJUK PRAYER CARPET[20] forms an additional center, at the tip of each motif.

Let us assume, with Dr. Geijer, that one of these two designs is copied from the other. Which one, then, is copied from which? It all depends on what we assume the weaver is trying to copy. If we assume that the weaver is copying realism, then of course, we shall assume that the Chinese example, being more realistic, must have come first. In this view the Seljuk example would be a rather clumsy copy, and might well have come long after the Chinese one.

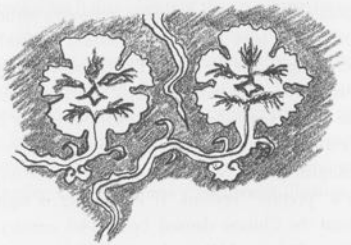
But, as I have tried to show, the weavers of carpets were mainly interested in creating a structure of symmetries which creates oneness in

13th century Seljuk carpet

14th century Chinese silk damask



Seljuk motif



Chinese motif

20 Page 127.

Realism as degeneracy: an obviously late dragon carpet

the plane — a picture of God. If we assume that the weavers are interested in the structure of local symmetries *then our analysis will be completely reversed*. In this case we should have to conclude that the Seljuk example, which plainly contains a far more complex symmetry structure, must have come first — indeed probably very long before the other. The Chinese one, on this analysis, is a rather clumsy copy, in which the subtle and beautiful symmetry structure of local symmetries in the Seljuk example, has been mangled almost beyond recognition to give way to a "prettier" realism. If Dr. Geijer is right about the Chinese damask being 14th century, this analysis would then place the Seljuk example one or two centuries earlier — certainly 13th century and perhaps even 12th.

On this page I have given one more example which shows how realism is a degeneracy, not an origin. Ellis[21] has published a peculiar dragon carpet, in which the animals are far more realistic than usual. Obviously this is not an early carpet. Ellis dates it as 19th which is probably correct. In this case, the beautiful and powerful forms of an authentic dragon carpet have given way to a silly realism, almost Disney-like, evidently introduced by a weaver who had no understanding at all of the meaning of the old carpets. The realistic drawing is *late*, not early. My argument is simply this: this is the rule, not

21 Charles Grant Ellis, *Early Caucasian Rugs*, Washington, D.C., 1975, Pl. 11, p. 53.

the exception. Realism follows abstraction at that moment when the weavers no longer understand the designs, but still want to introduce "something."

There is another important way of dating carpets: in relation to other contemporary artifacts. Consider, for example, the following fact about our own century. If we consider the artifacts of different decades — clothes, advertisements, automobile design, interiors, furniture, painting — by and large, there is a broad similarity of feeling, in the different media — and it is consistent in any given decade.

This fact is so obvious, that we can easily place something as "from the twenties" or "from the forties" — without ever having seen it before, simply because the feeling, the overall form-language of each decade is so particular, that we can identify it, even among artifacts which we don't recognize — and this consistency of morphological feeling is extremely reliable. If we see, for instance, a textile which has this similarity of feeling with other things that tells us it comes from the forties — we do not immediately construct a complicated hypothesis, to the effect that it is actually later in date, but was probably copied from an earlier artefact of the forties — etc., etc., etc.

In short, we are aware that human affairs have an overall gestalt in different periods, which changes consistently in broad general outline — and we recognize this consistency of feeling, from one medium to another. We can recognize a cloth that has a similar date to a Fra Angelico painting — because it has the same morphological feeling in its designs — and once we recognize this fellowship of morphological feeling in the two, we do not then construct an elaborate hypothesis to the effect that one actually must have been copied from the other, and that they come from different epochs.

Quite obvious similarities of morphological feel do exist between carpets, stonework, tilework, book design, metalwork and so on. Motifs which were used, in the Middle East, are very specific with respect to date. The kind of decoration which occurred in carpets, also appear in tiles, buildings, and other artifacts. And these change in quite obvious and characteristic ways from century to century.

If we pay more attention to these kinds of deep intuitive similarities, we shall see that, one is led to ascribe dates to carpets, which are somewhat different from "conventional" dates. Yet they make perfect sense. Indeed, to suggest that a given kind of design, when it appears in tilework is from the 15th century — but when it appears in a carpet, to then call this design 17th century — is perverse — and certainly not consistent with the basic methodological rule, that we should take the simplest hypothesis consistent with a given set of facts, until there is overwhelming evidence, which requires that it be rejected.

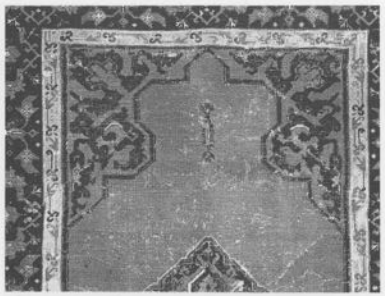
The simplest hypothesis about dating, would require that the carpets with a given kind of style, or given kind of symmetry structure, are assumed to have been produced in the same century that produced buildings, tiles, and other ornamented objects with the same morphological "feel."

Let me give some examples. Consider the SMALL MEDALLION CARPET WITH SQUARED MIHRABS from Ushak.[22] Tradition among carpet scholars has it that carpets of this type come from the 16-17th century. This opinion is repeated from source to source.[23] Yet the mihrab of the Green Mosque in Bursa, made in 1421, has almost exactly the same interwoven tendrils as we find in the border of this carpet, and as we commonly find in carpets of this type.[24] So does a border in a 14th century manuscript illumina-

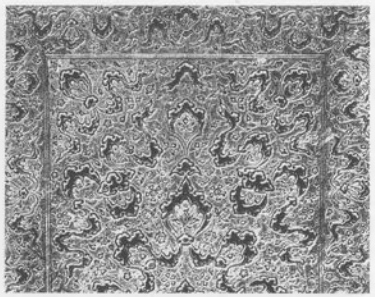
22 Page 215.

23 See for example, Donald King and David Sylvester, *The Eastern Carpet in the Western World from the 15th to the 17th Century*, Catalogue of the Exhibition, Hayward Gallery, London, 1983, Pl. 47, p. 77, or Gerard Paquin, "The Iconography of Everyday Life in the Nineteenth Century Middle Eastern Rugs," *Textile Museum Journal*, Vol. 22, 1983, p. 17, fig. 27.

24 See Gonul Oney *Turk Cini Sanati (Turkish Tile Art)*, Istanbul, 1976, p. 62.



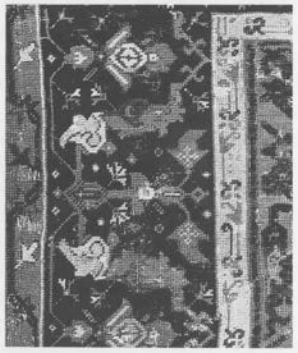
15th century Ushak



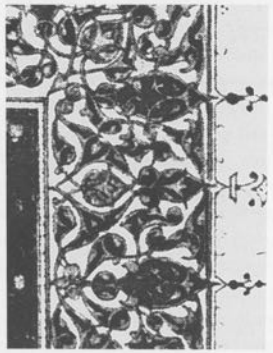
Arrangement of cloudbands on a 15th century book cover

tion.[25] And the same cloud band motif that is used in the spandrel of this carpet, appears in the very same configuration and feeling in the cover of a 15th century Timurid manuscript.[26] If we assume that motifs with the same morphological feeling are most probably contemporary with one another, we should also date the carpet to the 15th century.

On the next page, I show another example of this kind. The YELLOW AND BLUE CARPET WITH GRIFFIN AND ARCHAIC BORDER[27] has a magnificent and otherwise unknown yellow border. This border is striking because it is essentially made up of straight lines which criss-cross in a way to make dozens of overlapping and interlocking small compartments which are square and triangular. To my knowledge there are no other extant carpets with this border. The only other Turkish artifacts which have a similar structure, are borders which occur in the tilework of the Karatay Han, and other mosques in Beyshehir and Konya. This type of tilework design has the same straight lines, the same



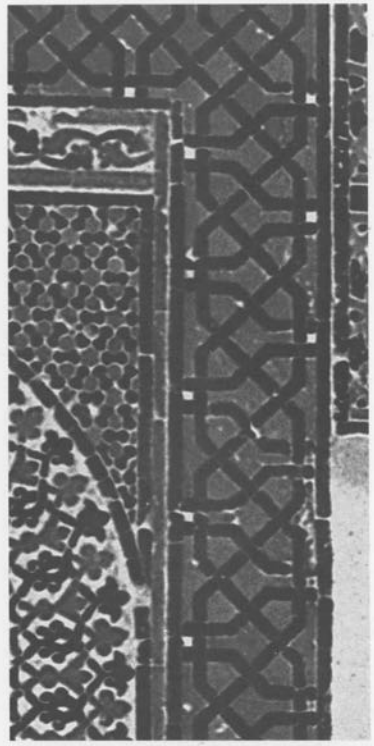
15th century Ushak



14th century manuscript border

25 Now in British Library, published Jenny Housego, "'Mamluk' Carpets and North Africa," Pinner and Denny, eds., *Studies II*, p. 233, fig. 23.
26 Dimand and Mailey, *Metropolitan Museum*, p. 36, fig. 52. Also see page 214 for discussion.
27 Page 159.

Border: Yellow and blue carpet with griffin & archaic border

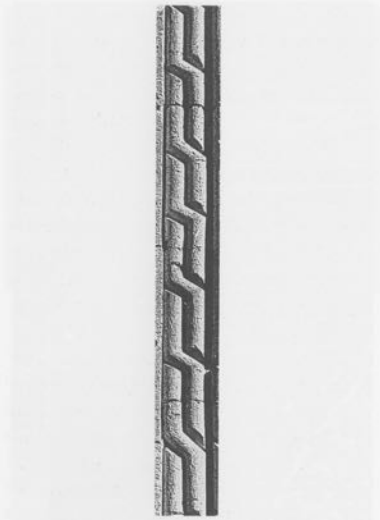


Tile border on the Karatay medrese, Konya, built 1251

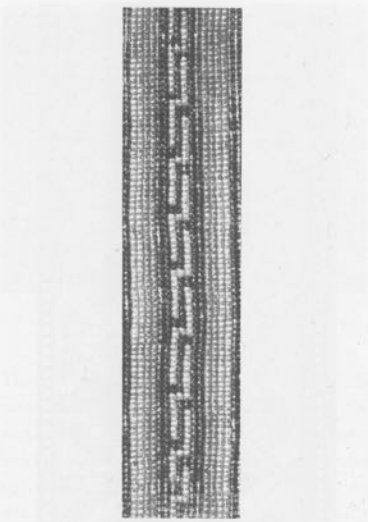
shaped compartments, and the same feel. This Karatay Han was built in 1240-1. In the absence of any other evidence, the simplest hypothesis is that the carpet was made at roughly the same time as the mosque: in the 13th century. To be conservative I have dated it 14th century.

Another example. The stone border shown in the photograph on the next page comes from the Sultan Han, Kayseri, date of construction 1232-6.[28] Other nearly identical versions of the same border were built in the Zazadin Han on the Konya-Aksaray road built in 1237, and in the Karatay Han on the Kayseri-Malatya road, built 1240-41. All three were built at almost precisely the same date, thus bracketing the date of this border form, when done in stonework, with considerable accuracy.[29] The design of these stone borders, though very rare in carpets, does appear in two known cases. It appears in the very early animal carpet recently bought by the Metropolitan Museum.[30] It also appears in one of Lamm's Fostat fragments in Stockholm.[31]

28 See Sonia and Hans Seherr-Thoss, *Design and Color in Islamic Architecture*, Washington D.C., 1968, Pl. 110, p. 241.
29 See Oktay Aslanapa, *Turkish Art and Architecture*, New York, 1971, figs. 95 and 98.
30 See *Hali*, Issue 53, 1990, cover story, p. 154.
31 See Lamm, *Fragments*, Pl. 25, p. 84.



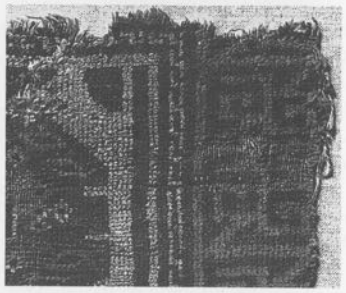
Stonework on the mosque at Sultan han, Kayseri, 1232-36



Border, Metropolitan Museum animal carpet, 12-13th century

The animal carpet is officially dated by the Metropolitan Museum to the 14th century, and Lamm's fragment is generally thought of as 15th century. Yet on the basis of the stonework borders I have cited, there is no doubt that both carpets should be reclassified to the 13th century.

The story of the published dating of the Metropolitan animal carpet is fascinating. When this carpet was first shown to me (before the Met bought it) Donald King dated it to the 15th century.[32] After my examination I dated it 12th-13th century, not on the basis of the stone borders just mentioned, but because in its morphological feel it appears similar to various medieval works. It is in my opinion almost heraldic, closely connected with Christian Medieval art, and certainly not later than 13th century in date. I said so to the previous owner's representative.[33] Based on my subsequent discovery of the Sultan Han, Zazadin Han and Karatay Han stone borders, my best guess would still be 12th century to first half of 13th century. Now, at the time of going to print I have just heard that the Metropolitan carpet has been carbon dated with a 95% probability that its date of origin lies between the 11th century and the second half of



Lamm fragment #25, with the same minor border, 13th century

32 Privately circulated analysis.
33 Private communication, June 1989.

Metropolitan Museum animal carpet, 12-13th century

the 13th century.[34] This carbon dating is almost precisely consistent with the dating done by my method, and with my own dating. Yet *even after receiving the carbon date* Daniel Walker, the curator of the Metropolitan Museum, still apparently insists that it is a 14th century carpet. Possibly he just cannot reconcile himself to the idea of the earlier date so — to cover his embarrassment with the factual evidence — he introduces a systematic error of about 150 years into the "official" date. This refusal to use the minimum hypothesis consistent with the facts, is typical of current carpet dating methods. On the other hand, the close correspondence between my dating of the carpet by the methods described in this essay, and the established carbon date, provide strong support for the idea that the methods and assumptions described in this essay are the more realistic.

There is an entirely different sort of argument, which also, in my view, points to the necessity of putting earlier dates on many carpets. This argument, is simply based on a statistical approach which suggests that there must be more 14th, 15th and 16th century carpets in existence than we have generally believed — and suggests, then, that many of the relatively early carpets we presently possess, must *be* precisely these 14th and 15th century carpets: while the few really very early carpets we have (such as the great Konya carpets and others) are likely to be even earlier.

The essence of this argument is based on the idea of attrition. That is, we try to guess what percentage of carpets from different eras have survived, by asking how long carpets will survive, on the average — and doing some calculations to estimate how many carpets, from any given era must still be in existence.

Let us consider the general statistical distribution of Turkish carpets, by centuries. Suppose that in any given century, a certain number of carpets have been produced. A few decades later they will begin to disappear, and a century later, some proportion of them will have been destroyed, worn out, or lost. Let us assume that this attrition rate is constant. This means, that in each successive century, the same relative proportion of the carpets will be destroyed or lost. Once again, this is a simplifying assumption.

We may now plot the number of carpets that we should expect to find, still intact, from the different centuries. In order to see how this works, let us begin with the simplest possible analysis, using made up numbers, just to see how the argument proceeds. I shall confine this argument to Anatolia. Let us first try to estimate the number of carpets produced in Anatolia, in any given century. As we have seen earlier, there was a single shipment of carpets in 1503, with 500 carpets sent into Brasov, one town in Transylvania. Of course we cannot estimate very

34 Information announced at the International Conference on Oriental Carpets, San Francisco, November 19, 1990.

much from this one number. However, it is certainly hard to believe that this was one tenth of the whole production of Anatolia in that year. Could it have been 1/100th. It still seems unlikely. But even if we make this very conservative estimate, that would imply that 500x100 = 50,000 carpets were being produced *per year*, at the beginning of the 16th century. By comparison, at the beginning of the 20th century about 250,000 carpets per year were being produced. To be very conservative I shall assume that only 10,000 carpets per year were being produced in the 10th century. This is probably not off by more than an order of magnitude. This would imply then, a total production of about 1 million carpets in the 10th century.

ple, for 10th century carpets it yields the following figures, shown in the chart below.

On this analysis, if 1,000,000 carpets were made in the 10th century, 300,000 would be left in the 11th century, 100,000 by the 12th century, and so on — until we find that there would be about 10 of them still in existence today. Further, still making the same assumptions, we can see that there would today be three times as many from the 11th century still extant (30); three times as many as that (100) from the 12th century — and so on.

Of course these numbers are completely fictitious. We do not know how many carpets were originally made in the 10th century; nor do we have a reasonable estimate of how many carpets

CARPET ATTRITION FOR 10TH CENTURY ANATOLIAN CARPETS

1,000,000	were originally manufactured in the	10th century
300,000	of them survive into the	11th century
100,000	of them survive into the	12th century
30,000	of them survive into the	13th century
10,000	of them survive into the	14th century
3,000	of them survive into the	15th century
1,000	of them survive into the	16th century
300	of them survive into the	17th century
100	of them survive into the	18th century
30	of them survive into the	19th century
10	of them survive into the	20th century

Let us assume, secondly, that one-third of the carpets which exist in any one century, survive to the next century. That is, that after 100 years, two-thirds of these carpets have been worn out or destroyed, and that one-third still exist. And, for simplicity, I assume also that this attrition ratio is constant from century to century since the beginnings of our era. (Of course this is not true; but until someone makes a more sophisticated analysis, I begin with this very simple assumption, just for the sake of illustration).

These two assumptions allow us to reconstruct the total number of carpets which remain in existence, from any given century. For exam-

typically survive from century to century. And one might argue that the attrition rate changes: the older a carpet is, the more carefully it is guarded against decay. But anyway, regardless of the fact that we do not have good estimates for these crucial numbers, it is plain, that an analysis of this kind is *possible*: and that even if we can only make crude estimates of these numbers, we shall then be able to estimate how many carpets from a given century, ought to survive into the present period.

The main thing that is visible from this rough analysis, is that with not too unreasonable assumptions about the two critical variables the

number of old carpets we would expect to have around, is surprisingly high. For example, we could then expect that as many as 1000 carpets or fragments from the 14th century are still in existence today.

There is one final argument to be given for the great age of many of the earliest carpets. This relies, simply on the beauty of the carpets, and on their "felt" closeness to the great animistic and pre-classical tradition.

Consider, for example, the EARLY CARPET WITH SPOTTED LOBES.[35] This carpet has been dated by at least one writer to the 17th century.[36] I believe Dr. Klose had not seen the carpet itself at the time of her article, and reached her conclusions from a picture. Yet those of us who have actually handled the carpet repeatedly, have an entirely different feeling about its age. Garry Muse used to call it "the old rug." Alan Marcuson, writing in *Hali* a few years ago, describes it in terms which suggest (though he does not claim) a 14th century date.[37] There is a feeling about this carpet, which exudes age. I myself also believe that it goes back to the 13th or 14th century, mainly because its *morphological feeling* is consistent with the culture of that age.

To give a comparable example from another collection, Batari has published and discussed a famous white ground carpet in Budapest: the so-called "crabs" rug. He dates it to the 17th century.[38] Yet if you look at this carpet with open eyes, it seems highly unlikely that it was made in the 17th century, and must have been made in the 16th, most likely, or conceivably in the 15th. This is because its forms, the careful semi-medieval lattice work, the imbrication of the wheels, the very complex and subtle handling of the centers in the crabs themselves, and the syncopated asymmetries and symmetries produced there, had all disappeared by the 17th century. The ability to do it no longer existed. Thus on aesthetic grounds, we can determine that it is a 15-16th century carpet.

A word of caution is needed. To make these determinations a careful eye is needed. Since the beginning of my interest in early carpets, more than one world famous dealer has come to me bringing tattered fragments from Turkey, with the notion that these are 15th century fragments. Yet in 90 percent of the cases, once again on aesthetic grounds alone, it is obvious that they are 18th century or even 19th. The beautiful and complex centers are missing, the design is gone, the picture of God is almost if not entirely missing. Thus the aesthetic argument, which is

White ground crabs rug, 15th or 16th century, not 17th

the essence of the dating problem, has to be handled with extraordinary caution, and with a critical eye.

Time, and other forms of scholarship, will

35 Page 169.
36 Christine Klose, "The Origin of the "Serapi" Carpet Design," *Hali*, Vol. 6, No. 4, 1984, pp. 401-402.
37 Alan Marcuson, Connoisseur's Choice, "Early Anatolian Animal Medallion Rug," *Hali*, Issue 38, 1988, pp. 14-15.
38 Ferenc Batari, "White Ground Anatolian Carpets in the Budapest Museum of Applied Arts," Pinner and Denny, eds., *Studies II*, p. 202. Also illustrated in Vegh and Layer, *Transylvania*, Pl. 7.

show whether I am right or wrong in these ascriptions. However, I should like to finish this essay, by explaining why I have taken the trouble, to make these possibly controversial statements about date. Since my main concern is the inner order which has been created in these carpets, why then should it be important to find out, or speculate, about the dates when the carpets were woven.

Why is it not enough merely to study the carpets themselves? There are several reasons. First, the field of centers — the main structure which I wish to describe — occurs most profoundly in the very earliest carpets, 12-14th century, occurs to a slightly lesser degree in the great carpets of the classical period (15-16th century), then declines in the 17th and 18th centuries — and is finally missing almost altogether in the carpets of the 19th and 20th centuries.

Since there is such a pronounced correlation between date and quality, the date is of great importance — if for no other reason than that the early carpets tend to be more profound than the later ones.

But the date also enters into our understanding of the carpets in a more significant way. There were trends in architecture, similar to those which I shall describe in carpets. Among buildings, in Turkey as in Europe, the most spiritual buildings were built by the great Seljuks — up until about 1450. When the Ottoman period began, this spiritual depth was gradually replaced by a more realistic, more "boudoir-like" decoration, often very pleasant, but quite different in spiritual quality. This is already clear in buildings, since we have the dates of buildings rather well defined.

The dating of carpets which I propose, corresponds to that of buildings — and indeed, the most spiritual of the carpets seem to have been woven, by my dating, up until the 16th century, and not much later.

If we were to accept the present tradition of carpet dating, then several of the very primitive and "spiritual" carpets, would appear to have been woven well after the onset of the floral Ottoman period — a conclusion which is very much at odds with the historical facts about the Seljuk empire, the high point of the Sufic tradition, and would therefore somehow make less overall "sense" than the dating which I propose. Since I am especially concerned with the highest levels of spiritual order that can occur in carpets, and the exact conditions under which this did occur, the dating is therefore rather important for this second reason.

Finally, there is a certain reverence which surrounds the age of a very old carpet — simply because we may marvel at the fact that it has been preserved for as long as it has. Since the most marvelous carpets are, in my opinion, so much older than implied by current scholarship, I should like to have this opinion noted, and discussed, simply out of respect for the carpets themselves — because, if true, it will ultimately increase our respect, or underscore a respect that begins quite simply with respect for the order and depth of the carpets themselves.

PART THREE

THE CARPETS

On the following pages, I present seventy-four carpets from my collection. Each carpet is shown by a colored photograph, and all the carpets are shown at exactly the same scale: slightly less than one-tenth of full size. I have done this so that the carpets may be seen in their actual sizes, in proportion to one another. Carpets shown in books are often represented without regard to their scale. Yet the actual size of a carpet is always one of the crucial features of its design. I have shown them all here, at the same scale, so that this key feature of the carpets shown in this book may be preserved and felt by the reader. In half a dozen cases of very large carpets we are able to see only a portion of the carpet on the page, even though the carpet itself is complete. I believe this price is worth paying, to get an accurate feel for the relative size of all the carpets in relation to one another. The uniform scale is 1:10.33. Sizes are given in centimeters. For complete carpets, the size given is the size of the carpet. For carpets and fragments mounted on a backing, the size given is the size of the backing.

The carpets range in age, from 12th century to 17th century. Within the limits of my knowledge, I have presented the carpets in their chronological sequence, so that, if you examine the carpets page by page, you will get an impression of the actual progression from the 12th century to the 17th. For reasons already stated in part 2 (and re-emphasized in part 4) I believe the historical progression is an important part of any proper understanding of the carpets. I cannot be sure the dates for individual carpets are correct. As is well-known, the problem of dating is controversial. However, even though there may be argument about particular dates which I have given, I believe the general progression from earliest to latest is unassailable. I am confident that the carpets were made approximately in the order presented in the book.

ENDLESS KNOT DESIGN HISPANO-MORESQUE CARPET

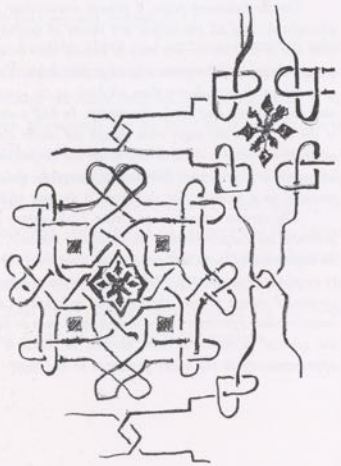
SOUTHERN SPAIN
62 cm x 250 cm

Throughout the dark ages, the endless knot design appears again and again, on artifacts from Ireland to Spain, to Persia, to Carolingian Germany. The endless knot is, of all patterns, one of those where the design to produce unity by "weaving" space together is most explicit. The idea is that the knots surround and include space, in a series of ambiguously connected regions, with an endless cord which wraps, knots, and includes them all.

This fragment, is one of three remaining pieces of the only carpet with this design known to me. When it sold at Lefevre in 1982, I was amazed that it caused so little excitement.[1] It is the only carpet, of any kind, which retains the fully developed endless knot design, familiar to us from early medieval manuscripts. Although current dating has tended to ascribe this carpet a 15th century date, I am certain in my own mind that this dating is not correct.

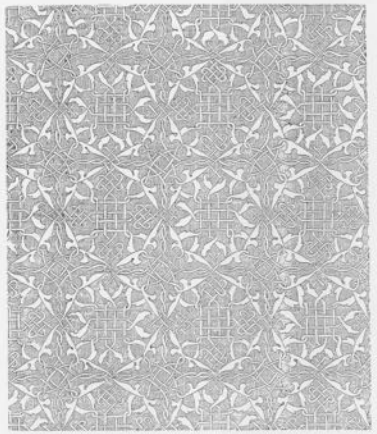
What we have here is an endless repeat design which precedes many of the later multi-centered octagon grid designs, such as that of the small pattern Holbeins, the Lottos and the bird carpets. But the endless knot design that appears here, produces a structure of centers which is far richer, far more complex, and far more deeply organized than the grids of those carpets, which we shall study later in the collection.

Two artifacts in the literature which *seem* to correspond closely in overall design feeling, date from the late 13th and early 14th centuries. They are, first, the stone carving on the Sivas medreseh, built in 1271-2,[2] and second, the page from the Rashid Al-Din manuscript of 1310, now in the Biblioteque Nationale, Paris.[3] Both have an overall braided interlace of approx-



The basic knot motif

1 Previously published in *Lefevre*, June 18, 1982, Lot 24. It was also published earlier while still attached to another piece of the same carpet now in the Frankfurt Museum der Angewandeten Kunst. Ian Bennett, *Complete Illustrated Rugs and Carpets of the World*, New York, p. 6, and Reinhard Hubel, *The Book of Carpets*, New York, 1970, p. 295.
2 Illustrated in Riefstahl, "Primitive Rugs," p. 19, fig. 21.
3 *Ibid.*, p. 24, fig. 27.

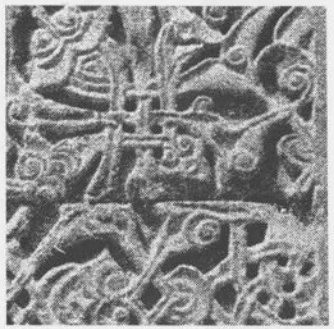


Rashid Al-Din manuscript of 1310, with braids, but no knots

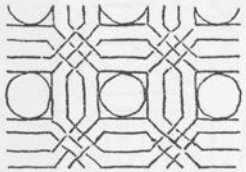
imately the same complexity, and in both cases, the general design is one which interlocks octagons with four-pointed stars, in the classic tiling arrangement. However, these examples only have an interlace, not a true knot. Neither has a truly *knotted* arrangement.

Similar designs occur in the published pictures of Timurid carpets, which again only *seem* to be knotted. See for example the versions of 14th and 15th century Timurid designs published by Amy Briggs.[4] There are four sources given in Amy Briggs.[5] They are the following: Fig 11, design from an illuminated Koran, AD 1026; Fig 17a, pillow design, Shah Námah ms, AD 1340; Fig 17b, Floor pattern, Jacobite lectionary, AD 1216; Fig 26, Rashid al-Din ms, Paris, AD 1310. These four sources of interlace designs, have an average date of 1223, already far earlier than the 15th century date presumed by other authors for the present carpet. But the carpet shown here has a more archaic version of the design than the Timurid diagrams, and far more closely resembles the true knot designs of the illuminated manuscripts of the 8-9th centuries. Although the Timurid designs contain single knots, quite frequently, most of the lines are laid over each other, and looped through each other.

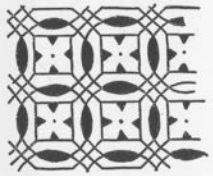
In this carpet, we have a single line, which is knotted, re-knotted, interlaced, and doubled back and re-knotted again. It is a looping, truly knotted line, with knots appearing again and again throughout its length. This type of design is unknown in Islamic art, and virtually un-



Knotted motif from Seljuk carvings at Sivas, 1271 AD



From Briggs, design from illuminated Koran, 1026 AD

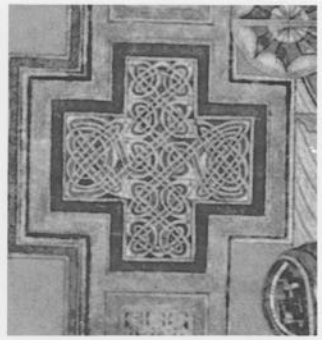


From Briggs, pillow design, Shah Namah manuscript, 1340 AD

4 Amy Briggs, "Timurid Carpets, I. Geometric Carpets," *Ars Islamica*, 1940.
5 *Ibid.*

known even in Moorish art. It occurs, as far as we know, only in the art of the so-called dark ages: the Celtic art of Ireland, and England, the earlier wood carving of the stave churches in Norway and, to a degree, in the paintings of the Leonese period in Spain.

Knotted design in the Book of Kells, 8th-9th century



Enlargement from the Book of Kells

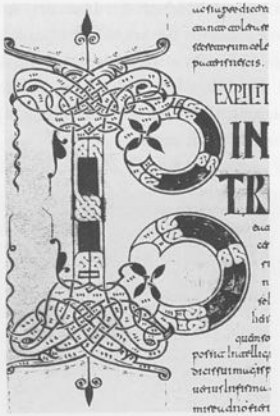
If we examine the dates of the cases where a true knotted design (similar to the design of this carpet) appears, we find that all of them are grouped from the 4th century AD to the 10th and early 11th centuries. The Celtic examples come mainly from the 8th, 9th and 10th centuries. The examples of Leon come from the 9th and 10th. Those examples of Byzantine decoration, where true knots occur, date from the 4th to the 10th and 11th centuries.

Indeed, examples of the fully developed endless knot design, as we see it in this carpet, were rare even in art of the Carolingian period, where this design was most freely used, and full use of the design where it covers a full field is extremely rare. In early Spanish manuscripts, we find it in a few Leonese illuminations—typically from the 10th century. For example, a Castilian manuscript of 945 AD shows an elaborate version. It appears in the Morgan Beatus of 926 AD, the Leon Bible of 960 AD, and in the prayer book of Fernando and Sancha dated 1055 AD.[6] Similar, but far more elaborate end-

Second Bible of Charles the Bald, 870 AD, North of France

6 For all these see Williams, *Early Spanish Manuscript Illumination*, New York, 1977, fig. X, Pls. 21-22, 12, and 35b, respectively.

Detail from the Morgan Beatus, AD 926



Initial from Florentius' Moralia in Job, 945 AD

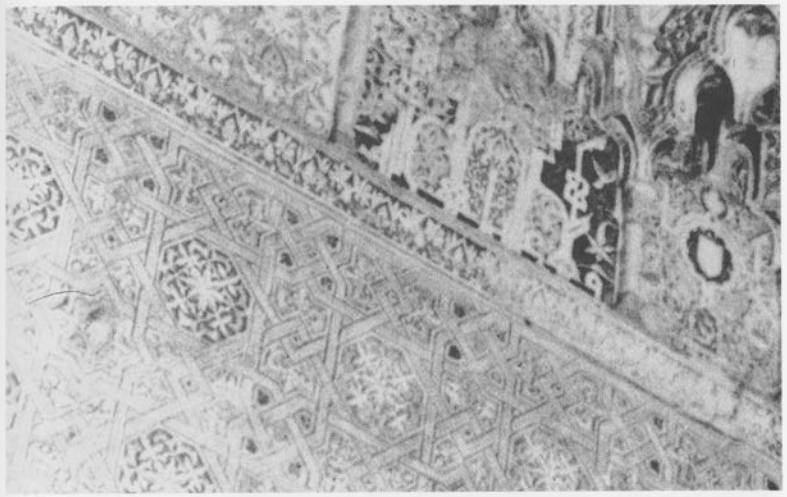
less knot designs appear in the earlier Book of Kells, c. 8th-9th century.[7]

Since this carpet does have a true knot design, and was almost certainly woven in Spain, it seems most likely that it was woven at the time of the Leonese painting and illuminations — that is to say, between the 9th and 11th centuries.

I wish to repeat for emphasis, that *there are no examples of the true knot design appearing consistently in the art of any period, later than the 11th century*. Of course, there are idiosyncratic cases of true knots drawn later — as for instance, in Leonardo's famous emblem, drawn by him in the 15th century as a resurrection of earlier designs. However, isolated cases of this kind, seem unlikely to explain the creation of a traditional object like a carpet. Although it is possible to insist that the carpet could have been woven in the 15th century, by assuming some kind of analogy with the Leonardo case, it would seem capricious to choose this theory in the face of the evidence just presented — and could, it seems to me, only be motivated by an intense and unfounded determination to shore up the erroneous system of dating that we have accepted.

In Spain the period of the 8th-9th centuries coincides with the very beginnings of the Moresque period. As we know, the Moors crossed into Spain in 711 AD — at the beginning of the 8th century. They ruled roughly until the end of the 15th century, when the Spanish took back Granada. Thus the period of Islamic art in Southern Spain lasted seven centuries, from the 8th to the 15th. So far, in the conventional literature of carpet-dating, with only one exception, Islamic Spanish carpets have all been dated to the 15th century. Evidently this date began life as a "terminus ante quem." In other words, one could at least be sure that the Islamic designs (as opposed to European designs), among Spanish carpets were woven *no later* than the end of the 15th century, since at that time the Islamic culture was effectively destroyed in Spain. And of course it is reasonable to suppose that *some* early Spanish carpets were indeed woven *in* the 15th century. However, carpets were certainly also woven in the 9th, 10th, 11th, 12th, 13th, and 14th centuries in Southern Spain.

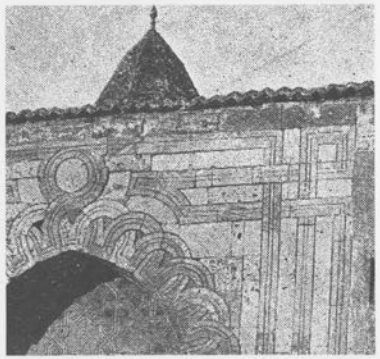
7 See for instance, *The Book of Kells*, folios 290, 291, and 129.



The Hall of Abencerrajes, Alhambra, early 14th century

What reason is there not to give this carpet its proper place in the sequence. When we find a design that is so unusual, and akin only to 8-11th century art — clearly related to many pre-medieval manuscripts in its use of the endless knot design — it is absurd to give it a 15th century date instead of the 9th, 10th, or 11th century dates which might reasonably be argued. Open consideration of the facts about the evolution of true knot designs can leave little doubt that the overwhelming probability of judgement, must lie with the earlier dates. This carpet was probably woven in the 10th or 11th century and certainly no later than the 12th.

Braided designs — not true knot designs — also appear occasionally in early buildings. One appears, for example, on the facade of the Alaeddin mosque, Konya, built in the 12th century. Another crude version appears on the walls of the Alhambra, once in the hall of the Abencerrajes where there is an endless design all over the lower part of the wall; and again in the Mirador de la Daraxa.[8] The Alhambra work dates from the first two decades of the 14th century. This case is Spanish, like the carpet, but it is more crude in design than the finessed and complex drawing of the true knot-work in the carpet.



Knotted design at the Alaeddin mosque, Konya

8 Oleg Grabar, *The Alhambra*, Harvard, 1978, figs. 51, 53 and 61.

WHITE FIELD SELJUK CARPET WITH INFINITE REPEAT OF DRAGONS

NEVSHEHIR
139 cm x 254 cm

A Turkish art collector in New York found this carpet, about 1940, in the mosque of Nevshehir, 20 miles east of Aksaray, northeast of Konya. Without knowing very much about carpets, he recognized it as a work of great beauty and rarity. It then lay in his collection, unrecognized except by him, for forty-five years. He sold it to me in 1985.

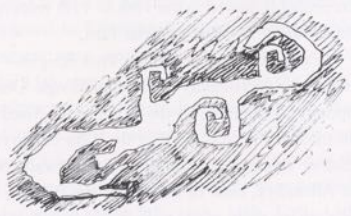
In design, weave and character, it is similar to the nine famous Seljuk carpets found in Konya and Beyshehir, although smaller, and of finer weave. It seems, in any case, to be one of the 13th century Seljuk carpets of Central Anatolia. The red on light red, and the greenish blue on dun off-white, are typical of these carpets. Most important and most typical is the extraordinary off-beat, asymmetrical design of the field — which is in this case also reflected about a central axis and thus made symmetrical. I nevertheless call the design asymmetrical, because the symmetry imposed on the design is secondary — and the main motif, and the power of the design comes from the asymmetrically interlocking hooks of figure and ground which produce an almost dazzling and impenetrable unity.

Most fascinating of all, the field design is made up almost entirely of dragons. The individual dragon is a stylized form. Its head has pronounced jaws, a hook for the front feet, a hook for the back feet, a straight belly, a hooked hump on its back, perhaps representing the upward curve of the dragon's scaled back, and a long tail which swishes down and repeats the jaw-like form of the head.

As we see on page 122, the dragon form is extremely similar to a 13th century stone carving of a dragon, also from Konya.[8]

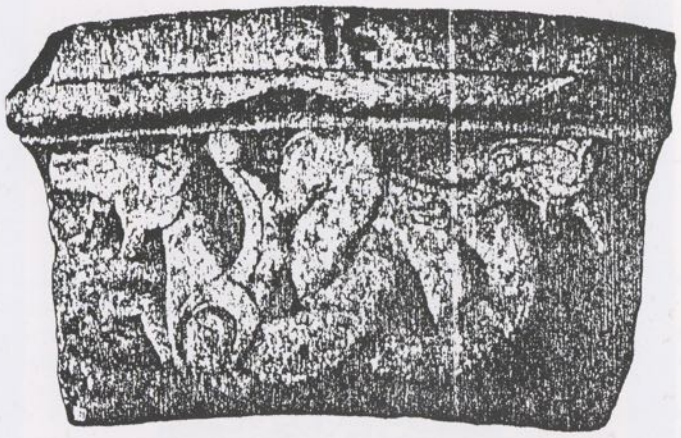
The whole field design is an infinite array of superimposed interlocking dragons, all looking towards the center and looking at each other. The design of a carpet entirely based on animal forms — not in the literal form of the dragon and phoenix carpet or the cock carpets of the 15th century, but in a more stylized form which literally fills space with animals — would seem to hark back to traditions of very great age. No other carpet with the same repeat of dragons has ever been found (see footnote 9, p. 125).

The asymmetrical forms give rise to an extremely complex wholeness. First we see a kind of backbone, of climbing arch-like structures. This is the largest overall pattern. Then, we see a kind of interlocking structure of hooks. If



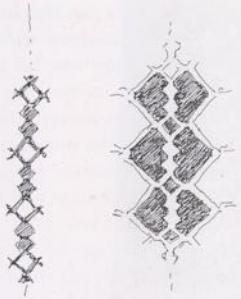
The single dragon from which the infinite repeat is made

8 F.R.Martin, *A History of Oriental Carpets Before 1800*, Vienna, 1908, chapter XII, p. 109, fig. 274.



13th century dragon sculpture from Konya

we look carefully, we see how the hooks are so carefully placed, that we can never quite be sure whether we are looking at blue hooks on the white ground, or at white hooks on the blue ground. The two are interchangeable and indistinguishable — so that there is a sort of swimming oneness, which does not easily break apart into fragments. We can see this most easily when we open our eyes very wide, relax attention, try to see the whole, and not the parts. When we look even more carefully at the local areas, we see animal-like things among the hooks. We see white dragons, interlocked with the hooks, facing in, and upside-down and facing out. Again, the dragon form comes most easily when we look, with a wide-eyed stare, not focussed, and blank and relaxed.



The system of wholes which forms the backbone

A single dragon

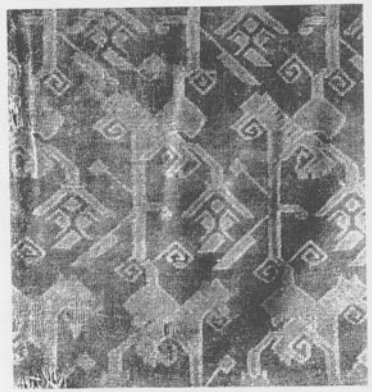
When we now look back at the whole carpet, we see these dragon forms, moving in and out within the whole thing, until we perceive the

Related carpet in Berlin

13th century Seljuk carpet

carpet as a kind of endless tapestry of living form, moving, writhing. And yet this moving tapestry of living form, is also still and perfectly harmonious. It holds to the fact that the intertwined arches climbing up the middle form the backbone of the whole carpet, seen as a whole, perhaps even as a whole single animal whose spine or backbone we are seeing here.

The larger wholes are still more complex. There is, first, a system of major interlocking centers that form a chain up and down the middle of the carpet. Each of these centers, is itself headed by a smaller lily-shaped center. At the side of the carpet, there are innumerable smaller centers, created by the hooks. Among these hook centers there are both blue ones and white ones,



Asymmetrical design on Beyshehir Seljuk carpet

since the hooks interlock reciprocally. Then, visible among the hooks, is the dragon-shaped creature I described before. This is a new center — and because of its existence, the hooks at its head and the hooks at its legs are also visible as new centers — head and legs. Further, because of the main spine, which is visible as a system of ascending centers in the middle of the carpet, we also see an inverse structure, descending, and cut in half by the edge of the carpet. By itself we would not see it. You can see this by covering the middle with your hand. When you cover the middle, the descending quality of the edge disappears. When you take your hand away, and see the ascending structure in the middle, the descending structure at the edge, reappears: it is caused by an

inverse reflection of the middle. This makes it clear how subtle the creation, and destruction, of wholes is. It is a global effect, which happens as a result of the configuration as a whole.[9]

Above all, it is the use of asymmetrical centers, to produce dense unity, which is most important about this carpet. We see it in half a dozen of the great Seljuk carpets, and to my knowledge, nowhere else. It appears in the "Chinese silk" carpet from Konya, in the light green on dark green carpet with star octagons and asymmetrical hooks, from Beyshehir, in the carpet from the Keir collection, and in one or two others. The complexity of this asymmetrical motif is especially reminiscent of the field design in the Seljuk carpet in the Keir collection[10] and also to the interlocking field and ground motif of Beyshehir #IX[11] and in Lamm's 13th century Fostat fragment #3.[12]

In each of these cases asymmetrical forms are repeated and combined in a syncopated rhythm, that creates new centers so baffling to the eye, that it is almost impossible to recognize that all of them are created from a single form repeated. In all these cases the field has a stunning life, a stunning power to keep the eye occupied, stunning profusion of unexpected and fascinating centers of different types. In each case, we have the simple repetition of a simple asymmetrical device, together with very, very careful and subtle placing. Somehow, this packing of asymmetrical centers then produces an intense profusion of new centers, and a degree of unity which appears in almost no other type of design.

I believe the discovery, and use, of this idea may be the clue to the greatness of the Seljuk carpets altogether. Those who have studied them have commonly felt that they have a power and aesthetic importance which lies entirely beyond their rarity and historical significance: they are of immense *artistic* importance. I believe that the dense packing of asymmetrical centers to produce a kind of dense unity — one might almost call it a "super-dense" unity — may be the fundamental thing that these Seljuk weavers knew, and the thing which was responsible for the artistic importance of their works.

It is significant that this carpet contains an extraordinary amount of staggered knotting.[13] This half knotting allows a far more subtle placing of dark and light — and thus a more subtle con-

Identical border design: Eshrefoghlu Mosque, Beyshehir

9 Two other published carpets are slightly similar in feeling. One is the animal carpet in Berlin's Museum fur Islamische Kunst, illustrated in Friedrich Spuhler, "Uncomfortable Questions About Unknown Turkish Carpets in the Berlin Collection," *Hali*, Vol. 4, No. 4, 1982, pp. 324-328, fig. 2. This carpet has a similar wild interlocking hooks forming the main part of the design. Another later carpet with a superficially similar design is a so-called Bergama in the Metropolitan Museum collection, Dimand and Mailey, *Metropolitan Museum*, p. 192, fig. 175, however it has lost the dragon motif, and thus the essence of the design.

10 See Friedrich Spuhler, *Islamic Carpets and Textiles in the Keir Collection*, London, 1978, Pl. 4, p. 53.

11 Riefstahl, "Primitive Rugs," p. 3, fig. 1.

12 Lamm, *Fragments*, Pl. 3, p. 36.

13 In a normal carpet, knots are on pairs of warps, 1 and 2, 3 and 4, and so on — so that the design moves by two warps at a time across the field. In staggered knotting, the weaver may use warps 1 and 2; then in another knot may be placed on warps 2 and 3, or 4 and 5. This allows the design to move by one warp at a time across the field.

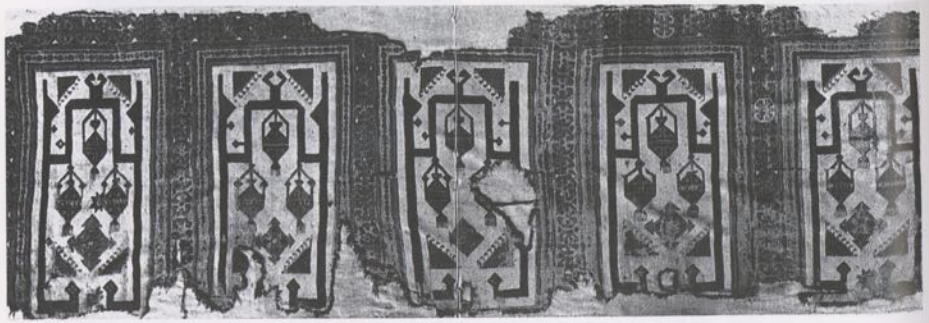
struction of positive and negative space than is permitted by normal knotting. The space of blue and white is so beautifully and subtly constructed in this carpet, that a xerox copy of the design, which usually increases the dark by 1% and reduces the light by 1%, completely loses the balance of dark and light. *The balance is so perfectly drawn, that even a 1% increase or decrease in black white relationships loses the life and subtlety of balance.*

For years I thought this carpet must be a long narrow carpet of very small scale, perhaps made for the steps of a minbar. However, I often wondered how best to show it, by mounting it on a backing. Very recently, in yet another experiment with possible backings, I found that the carpet looks best when it is mounted, as I have mounted it now, with a wide border around it. After looking at this format for a few days, I finally realized that the carpet almost certainly *had* a very wide border — similar in scale to the borders of other Seljuk carpets — around it, but that this is now entirely missing. After careful experiments, I found that the light greenish-blue stripes, which I have mounted on this border — must almost certainly also have been present. They reflect the light turquoise which appears in the carpet, and which is a standard dye in several of the great Seljuk pieces in Istanbul.

SELJUK PRAYER CARPET

KONYA
127 cm x 170 cm

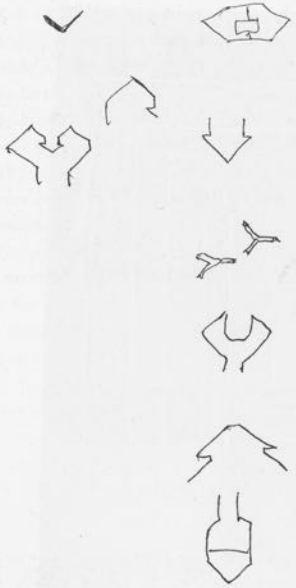
This carpet, possibly the only surviving single-niche prayer carpet of the Seljuk era, is a close counterpart of the famous 15th century white field saph in the Turk ve Islam Museum.[14] What is important about this carpet, and certainly most striking, is what we may call its "being-nature." When we look at this carpet, we are unaccountably, but quite definitely confronted with a being. I have already discussed this at some length in chapter 13 of part 1. I am in no way referring here to any notion that this carpet literally resembles a creature, or is in any way whatsoever derived from animistic forms. I am speaking only about its abstract structure — but this abstract structure is so conceived that to a depth extremely rare in any carpet, or in any work of art, one feels the presence of a being behind the form.



15th century saph in the Turk ve Islam Museum

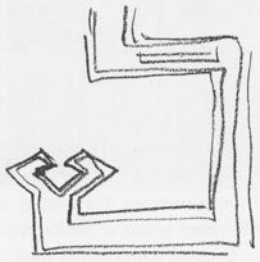
14 Published in Erdmann, *History*, Pl. III, and in many other places.

The "being" in the carpet depends on the structure of the local symmetries. If we examine the local symmetries, we find a rather unusual almost syncopated system of similarities within the piece. Unusual echoes of one form, appear in another, at a slightly different scale, and the



Echoes of the split Y-form throughout the carpet

interplay of these different similarities is extremely complex. For instance, the Y-turret at the top of the arches: three at the top, reflected in two at the bottom. Simple, but surprising. The lamp form, which appears on the motifs in the middle, in slightly different form at the sides, in different form again in the space between the posts. The basic theme of this carpet, the form which



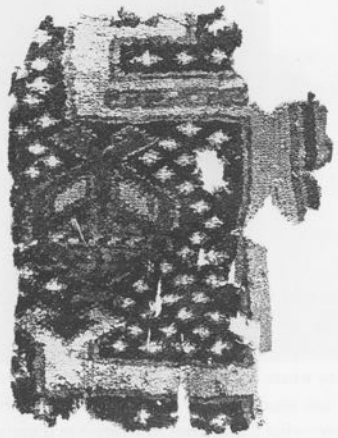
Turret with the split Y-motif

Lamp form made of the split Y-motif

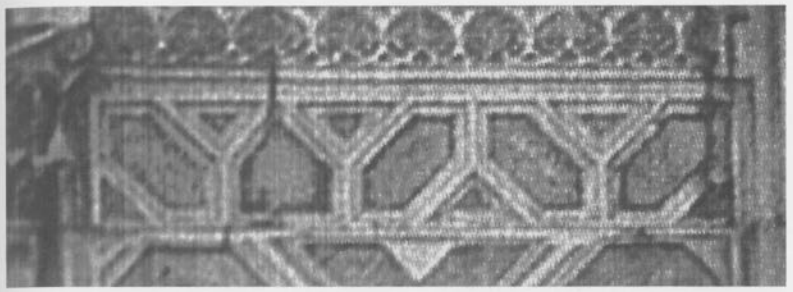
appears over and again, is the split Y — the wishbone form. Within the turrets at the top, we find a triangle in the space, formed by two similar triangles upside down. The form is echoed at the largest scale, in the wishbone of the main arch, splitting, to go to the two verticals.

It appears in opposed form within the border element (pairs within a small cartouche); it appears in the random decorations that stand horizontally jutting into the edge of the field; it appears in a "wrench" form, in the multicolored versions in the skirts at either end.

What is unusual about the way this form appears in the carpet, is how the same theme,



Fostat fragment from the Keir collection



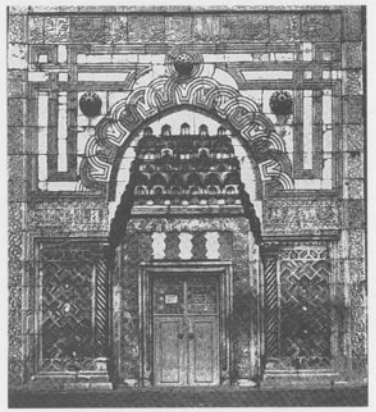
Detail of Y-forms in the Karatay Medreseh

appears at so many different scales. It governs the drawing of small details, as I have just described. It governs the lamp forms, at an intermediate scale; it governs the drawing of the largest lines which form the niche.

And, at each of these levels, there is an ambiguous symmetry structure that plays a crucial role. There is a version of the Y-form, which then appears, reversed, half overlapping itself, into a transformed version to one side. This happens in the drawing of the main niche itself; it happens in the smaller drawing of the lamps; it happens in the smallest drawing of the triangles which form the wishbones or turrets at the top and bottom of the carpet.

Thus the local symmetries of this carpet are arranged to produce an everlasting, syncopated series of half-rotations, half-reflections, which progress from one element to another, change scale, change position — and keep on moving across the carpet.

The small Y-figures which appear in the field, and which are also hinted at in the wrench shaped figures in the end panels, appear in only one other major Seljuk work known to me. This is the entrance of the Karatay Medreseh, Konya, built in 1251, where they also appear in the end panels of two ornamental rectangles.[15] I see no reason to conjecture that the carpet came from a different period. There is also considerable similarity between this carpet, and a small Fostat fragment in the Keir collection,[16] which Spuhler dates to the 14-15th centuries. The Keir fragment shows almost identical drawing of the main niche motif, and also almost identical drawing of the hexagonal lamp motif.



Entrance porch, Karatay Medreseh, built 1251

15 See Kemal Yetkin, et al, *Turkish Architecture*, Ankara, 1965, Pl. XXXI.
16 Spuhler, *Keir Collection*, p. 30, fig. 2.

BYZANTINE-TIMURID PROTOTYPE

ISTANBUL
Remaining fragment size 114 cm x 195 cm

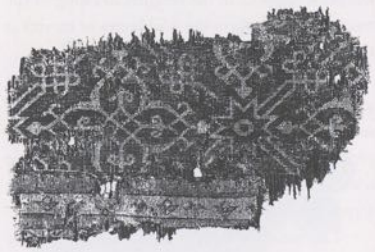
The illustration on the opposite page shows a painting by the author. This painting is a reconstruction of a great prototype carpet, which must, in my opinion, have existed in the 13th century. The painting is based on a five-year analysis of the kind of overall scheme or pattern which almost certainly must have existed at that time, in order to give way, centuries later, to the now-remaining fragment that is in my possession, and which is illustrated on page 133.

The two earliest groups of carpets of which we have extensive knowledge, are the so-called Seljuk carpets probably dating from the 13th century, and the so-called Timurid carpets, probably dating from the 13-14th centuries. Both types of carpets used fascinating and complex endless designs.

The Seljuk carpets, known to us from eleven examples found in Konya and Beyshehir, several dozen small fragments found in Fostat, and the WHITE FIELD SELJUK CARPET WITH INFINITE REPEAT OF DRAGONS in this collection,[17] have large-scale geometric designs, which are bold in delineation, and often include strongly asymmetric elements. There is strong emphasis on the shape of the negative space between the elements, so that this becomes as important as the shape of the figures in the design. The shapes are rather angular.

The Timurid carpets, known to us mainly through 14th and 15th century Persian paintings, various presumed Turkish "descendants" like the small pattern Holbeins and the compartment carpets, and one small fragment in Athens,[18] seem to have had endless designs which are more strongly symmetrical. The emphasis seems to have been on the endless symmetry of the design, often based on octagonal grids, endless knots and interwoven lines, and its elements. The shapes are more interlaced, rounded and intricate and more symmetrical than the shapes used in Seljuk designs.

In 1983 I discovered a carpet which seems to point to the existence of a previously unknown family of endless designs, related to both groups, but different in character from both. When I first saw the small Anatolian carpet advertised in *Hali* it seemed vaguely interesting.[19] The carpet had been cut, its geometrical pattern disfigured, and it was also discolored by extensive and horrible repairs. I was reluctant to buy it. However,



Timurid carpet in Benaki Museum

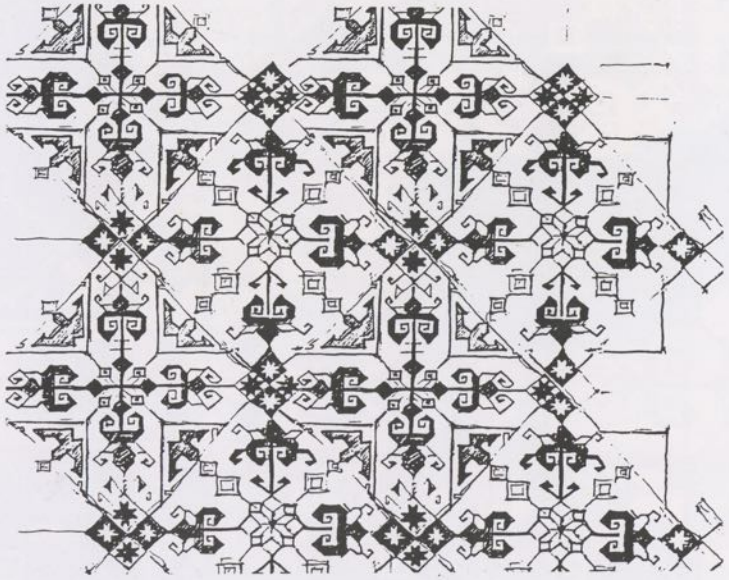
17 Page 121.
18 Louise Mackie, "A Piece of the Puzzle," *Hali*, Issue 47, 1989, pp. 16-23.
19 *Hali*, 1983, Vol.5, No 3, Hali Gallery 22.

The fragment as originally purchased

Gil and Hilary Dumas both felt it might be important, and advised me to think again. After examining its cut, and trying to reconstruct its original design, I realized that it was a two medallion design of the early Anatolian group, which I then thought of as a "Ghirlandaio" design.

I bought the carpet, and decided to examine it still further. I soon realized that the two parts needed to be separated, to form two square compartments. We physically separated the pieces. In its reconstructed form, it was clearly more interesting than it had seemed at first. However, the overall design still did not quite "make sense." And it was hard to discover the meaning of the strange zoomorphic forms along the edge. They seemed degenerate, but interesting, and hard to decipher (See page 134).

Gradually, Gil, Hilary and I pieced together the endless design from which its design



Drawing made after some study to show the endless repeat

The fragment in its final reconstructed state

originated. The breakthrough came in realizing that the forms along the edge which seemed animal-like were in fact arrowheads, just like those in the field of the carpet — which had been split right down the middle. At that stage it was possible to put together a complete picture of the original design, by redrawing the original reconstruction I had made, and xeroxing and pasting several pieces together. What emerged was the fascinating and profound design illus-

The "animal" edge design which is a split arrowhead

trated on page 132. I later made the painting illustrated on page 131, and on the last page of this book. In what follows I shall call this design "the prototype." I later also asked Davina Waterhouse to make the embroidery which appears on the fragment in its completely mounted form, to suggest the character of the missing design.[20] The painting I have made, though an attempt at reconstruction of a lost carpet, shows what I mean in the title of this book by "the art of the 21st century."

I have drawn the following conclusions about the prototype.

First, the actual design of the prototype is unknown. It is reminiscent of several Timurid designs identified and classified by Amy Briggs, but it is not exactly like any of them.[21] It is also not similar to any of the known Seljuk carpets or fragments. The particular combination of octagon and square, arrowhead and lines, in the very complex interplay which appears in this design, must have been a superb and magnificent design, when extended over an entire carpet. Second, it seems virtually certain that the prototype must actually have existed at some time as a real carpet. The gradual replacement of endless field designs, by later carpets which take one or two of the endless repeats, and make a whole carpet from them is well-known. It means that the fragment now remaining, must almost certainly have come from an earlier endless repeat design. In addition the success — that is the spatial coherence and harmony — of the endless repeat prototype which I have reconstructed can hardly be an accident. I discovered this prototype design, I believe, because it was "there" — in the morphology of the remaining fragment.

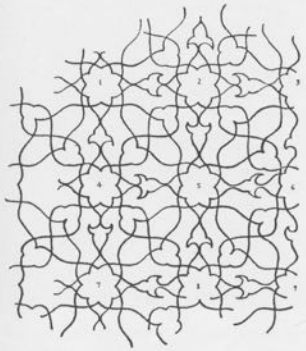
Third, the design is certainly very old. It seems that the prototype design (not the small carpet), must at least come from the same general period as the Seljuk and Timurid carpets — or perhaps earlier. In any case, not later. This is clear from the complexity and character of the design, and from the very definite relationships it has to these two well-known and identifiable groups. For reasons which I discuss below, there is strong possibility that the design is even earlier.

Fourth, it is clear that the design is very strongly related to the Timurid carpets. It must in some sense be an offshoot from these designs, or their predecessor, or a sideways related cousin. We may see this, most particularly, in the basic design of star octagons with crosses trapped between them. This is one of the most

20 Page 133.
21 Briggs, "Timurid Carpets," pp. 20-41.

fundamental Timurid archetypes, and is visible, in some fashion, in almost all the main types which Amy Briggs identified.[22] We see it also, in its strong emphasis on octagonal symmetry, in the interlock of squares and diamonds, and in the extensive use of thin lines to form the design.

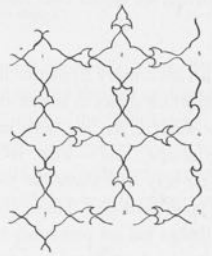
Fifth, it is also clear that the prototype contains very strong features of Seljuk art. This is more visible in various motifs and elements, than in any actual similarity to the twelve remaining Seljuk carpets. For example, the square with eight diamonds in the star octagon positions, which occurs at the center of the main motif, occurs in three of the Konya carpets, drawn in identical fashion.[23] The strongly drawn and sharply cut curved-arrowhead motif, appears repeatedly on early Seljuk carvings, published and discussed by Riefstahl.[24] The four-armed arrowhead design also appears explicitly in various 12th century Seljuk tiles in the palace at Kubadabad. Similar forms made of diamonds, triangles, and latchhooks, appear repeatedly within the Seljuk carpets themselves.[25]



One Timurid type shown by Briggs

Thus, the prototype which I have drawn, seems to have the geometry and structure of the Timurid carpets, combined with certain elements of the Seljuk carpets.

It is possible, then, that in this prototype, we have a type of carpet which links the Seljuk carpets with the Timurid carpets. There has been relatively little discussion in the literature, about the relation between the two, and the discovery of a possible "missing link" is therefore



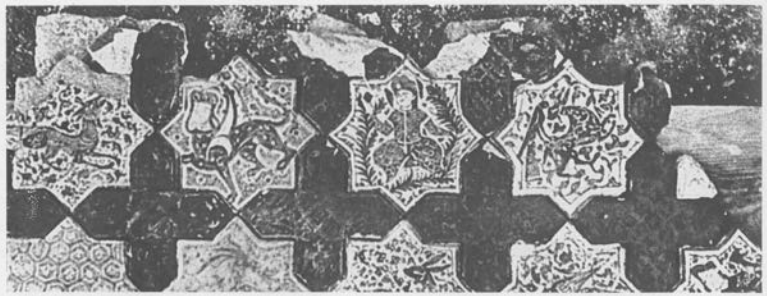
Another Timurid type drawn by Briggs

fascinating in itself. In any case, the existence of a carpet which clearly has qualities of both Seljuk and Timurid carpets, does seem to indicate a common origin, or connection for the two groups, and may therefore change our picture of early carpet production in a fundamental way.

As far as place of manufacture is concerned, the carpet in this collection is certainly Turkish. In the absence of any other information, the minimum hypothesis would have to be that the prototype was also made in Turkey.

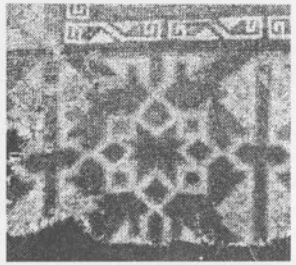
Finally, and most fascinating of all, there is a possibility that the prototype was not Seljuk or Timurid, but Byzantine. According to Riefstahl, the existence of Byzantine carpets has been established by Ebersolt.[26] In addition, Riefstahl

22 Briggs, "Timurid Carpets," pp. 20-54.
23 Oktay Aslanapa, *Turkish Arts*, Istanbul, n.d.; Yetkin, *Turk Hali*.
24 Riefstahl, "Primitive Rugs," pp. 1-44.
25 Lamm, *Fragments*. Kurt Erdmann, *Der Orientalische Knupfteppich*, Tuebingen, 1960.
26 I have not been able to check this reference myself, but Riefstahl quotes Ebersolt, *Les arts somptuaires de Byzance*, p. 4, see Riefstahl, "Primitive Rugs," p. 18.



Octagon star design on tiles from Kubadabad, AD 1236

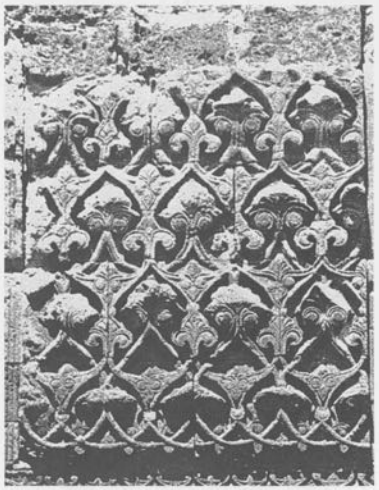
published a 12th century Byzantine illuminated manuscript, which shows an almost identical design in the field. It has the same star-octagon and cross design, and — what is most important — *the very same shield-like forms, in exactly the same positions*. Thus, though this prototype design has not previously been found in a carpet, it has been found in a 12th century



Border of the Beyshehir Seljuk carpet

illuminated manuscript, apparently produced in Istanbul then under Byzantine rule.

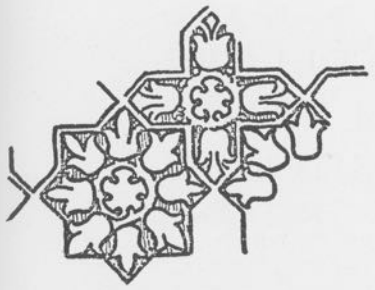
Of course, the star-octagon and cross design itself is widespread, and very ancient. It occurs throughout Middle Eastern, North African, and Christian art, from the 6th century on. However the version which occurs in the prototype, with its emphasis on the shield-like arrowhead forms which fill the cross and octagon compartments, is previously not known at all. With amazing foresight, Riefstahl published the Byzantine manuscript page because it "resembled" a car-



Seljuk arrowhead motif, Turumtai Turbeh 1278 AD

pet, and was so unlike other illuminated manuscripts of the period, that it made him wonder if it was not, perhaps, a direct painting from a carpet of the Byzantine era (sic).

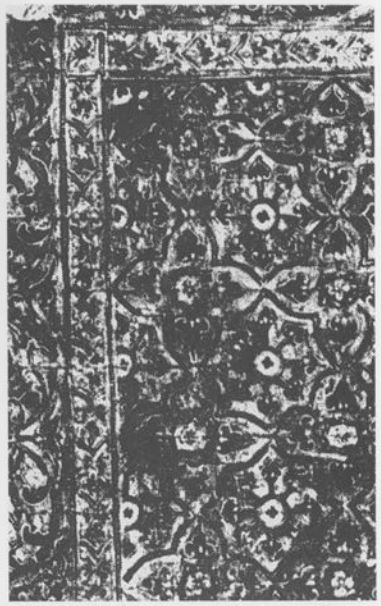
Riefstahl's speculation has never so far been confirmed, since we do not so far, possess any



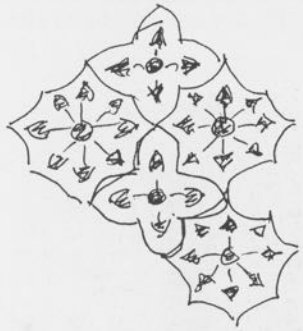
Stucco design from Samarra, 9th century

12th century Seljuk tile with star and cross design

clues, to the design of any carpet made in Turkey in the Byzantine era. But since the design of the prototype which I have described in this article is so strikingly similar to this 12th century Byzantine manuscript, and since this design is not recorded anywhere else in the literature on carpets, the most reasonable interpretation of the facts would suggest that the prototype was itself Byzantine, made in the 12th century. If so, then the fragment, and the reconstruction I have given, would be of extraordinary importance, since we would then have to recognize the proto-



12th c. Byzantine manuscript with almost identical pattern



Design of 12th century Byzantine illumination

type as the first recorded example of a Byzantine carpet.

As for the fragment itself, it is probably not as old. It is not a fragment of an original great prototype design carpet, but a smaller carpet whose design is based on a reduced portion of the original full design, and must have been woven at least one or two centuries after the Byzantine or Seljuk period when the prototype itself existed.

RED AND YELLOW CARPET WITH DRAGONS AND FISHES

SARKISLAR, EASTERN ANATOLIA
184 cm x 354 cm

This extraordinary animal carpet is of almost unknown design. Its glowing colors and shining wool mark it as something of great age and importance. Yet it is extremely hard to place. Most striking in the design are the bands of yellow, with small purple zigzags, and the animals which are repeated frequently throughout the field. The smaller animals are apparently fishes. The larger animals—the long yellow bands, with dragon-like heads—are certainly dragons. In addition, the manner of the carpet, with its long dragon-like tendrils, is reminiscent of medieval Norwegian

Dragon on Lom stave church, Gudbrandsdal, 13th century

Medieval carving of a dragon, Hylestad Church, Setesdal

"Linear" dragons from the Book of Durrow, 680 AD

Detail of portal, Al Church, Hallingdal

carvings. Josef Strzygowski has shown how the trade route from Norway to Armenia, along the Danube, brought many motifs from Norway to Armenia and the Middle East, during the first millennium.[27]

In this carpet we see how the field of centers can produce an animal "essence" all over a carpet. The linear dragon motif, that also appears in this carpet, is extraordinarily ancient. It does

Carved dragons on the roof, Forutn stave church, Sogn, 1200

Carved dragon on a plank, Horning Church, Denmark, 1100

27 Josef Strzygowski, *Origin of Christian Church Art*, London, 1923.

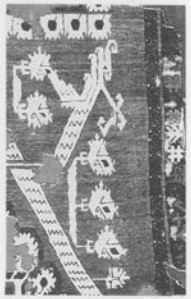
Planks from a stave church now disappeared, about 1150 AD

Doorway first half 12th century, Gotlands Fornsal, Visby

not only appear again and again on 12th and 13th century Norwegian stave church carvings from the Middle Ages. It appears in illuminations from the 7th century AD. It also appears in virtually the same form, in a prehistoric Chinese carving from the 8th century BC.[28]

The same dragon motif from prehistoric Chinese stone carving

The fish motif



The dragon's head

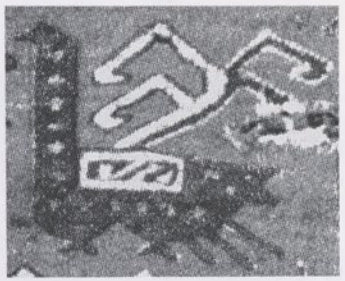
28 For an example of a 7th century illumination, see the illustration from the Book of Durrow, AD 680, Carl Nordenfalk, *Celtic and Anglo-Saxon Painting*, New York, 1977, Pl. 8. For the prehistoric Chinese carving, see E.A. Salmanoff, "Dragons and Dragon Carpets in the Caucasus," *Oriental Carpet and Textile Studies I*, London, 1985, Robert Pinner and Walter B. Denny, eds., p. 189, fig. 4.

RED CARPET WITH TREE OF LIFE AND ANIMALS

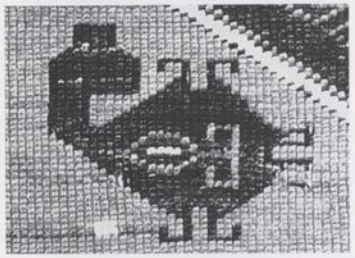
KARAPINAR
90 cm x 155 cm

Of the carpets in the collection, this might be called the masterpiece of color. Indeed, of all Turkish carpets I have ever seen, this is perhaps the one with the most densely saturated color, and the one where color reaches its most extraordinary meaning.

When I acquired the carpet, it consisted of two fragments which had been sewn together to form a whole. One evening, in a discussion with Friedrich Spuhler, he pointed out to me that for a Turk, this wonderful almost unimaginably red red, would be the main thing in the carpet — and this sea of red, glowing and intense, is the main value which the carpet would have, looked at from a Turkish perspective. He advised me, I believe quite rightly, that if the carpet were separated into its two halves, and mounted, this wonderful everlasting sea of red, would then be destroyed — and that the person who had sewed them together was obeying a deep and sensible instinct, in thinking the glow of the color more important than the particular geometrical arrangement of the field design. I was very impressed with Dr. Spuhler's comment, and decided to leave this carpet, exactly as it came to me — without "cleaning it up."



Bird with tail feathers from Konya carpet with birds



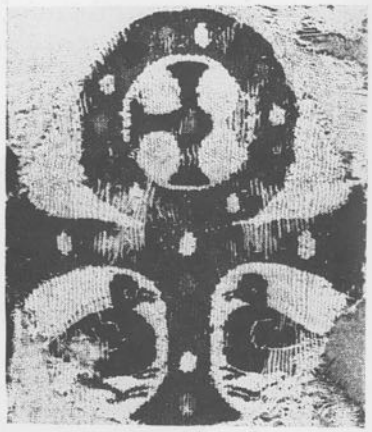
One of the eight animals (birds) from this carpet

I believe it is the color, and above all, the feeling of the color and its saturation, its intense almost bodily experience, which is the main thing that was created in this carpet. Indeed, in this carpet, we reach a level of color interaction so intense, that it draws attention to the way that color is used to intensify the centers in a field, and that these centers then work back to intensify the color. Centers are often intensified by dark-light differentiation — by a vital interplay between dark and light. When the different colors are too uniform in tone, the carpet almost never has a proper brilliance, and the contrast of dark and light intensifies the brilliance. In this carpet, the same effect — but more complex and more profound — is created by the interplay of starkly different colors. Thus the brilliance is created by the shocking contrast of green, orange, blue, red and white and black and yellow.

As far as design is concerned, the carpet contains eight small animals or birds, arranged in octagonal format around the remains of a blue octagonal medallion in the center. The four tail-feather motifs that radiate out from the blue medallion are the same as the tail-feathers from the famous two-beast carpet in the Vakiflar Museum,[29] and the same as the tail feathers on the

29 See Yetkin, *Turk Hali*, Pl. 17.

Gilded bronze feng-huang, Han dynasty, 2nd millennium BC



Ankh and doves, Akhmin, 4th-5th century

"many-chicken" carpet from Konya.[30] I believe that the original carpet may very well have contained a blue medallion animal, so that the tail feathers are not merely radiating from a medallion, but in some sense *form* an animal being.

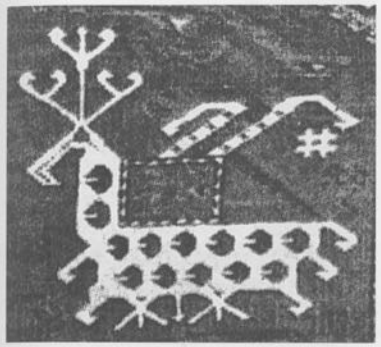
Most striking in the whole carpet, is the yellow tree motif which appears at both ends of the field — where the deeply saturated blue, deep yellow, and the dark almost blackish fully saturated red of the field interact in their glorious way with small amounts of green and orange.

This motif, though simple in conception, is unknown to me in any previously published carpet. Yet in this motif we see an almost pure example of the animal tree motif: a tree, flanked by a pair of facing animals. See the long discussion of this motif given by Robert Pinner.[31] As Pinner says, the tree is often crowned by a sun-like motif: "...Another element which is often associated with the animal-tree is a winged disc or other sun-associated symbol, which hovers over the scene or sits on the tree."[32] In this carpet we see the orb above the tree.

Tree, griffin and winged disc, Armenia, 7th century

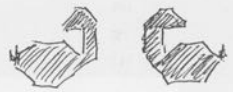
Tree and priests with winged disc, Syria, 8th century

30 *Ibid.*, Pl. 20.



Animal with tail feathers from Vakiflar carpet

Mesopotamian tapestry, 8th century



Four birds, two facing in, two facing out, in this carpet

The arrangement of the four animals around the central medallion, is identical to that which occurs in an 8th century Mesopotamian embroidery.[33] The two pairs of animals are reversed at top and bottom. At the top of the carpet they face each other; at the bottom they face away from each other. The same reversal also appears on a Sicilian textile of the 12th century.[34]

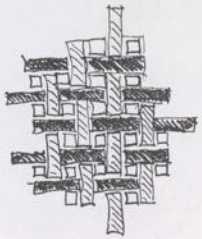
12th century Sicilian textile

31 Robert Pinner, "The Animal Tree and the Great Bird in Myth and Folklore," *Turkoman Studies I*, Robert Pinnner and Michael Franses, eds., London, 1980, pp. 204-248.
32 *Ibid.*, p. 206.
33 See Nancy Pence Britton, *A Study of Some Early Islamic Textiles in The Museum of Fine Arts Boston*, Boston, 1938, fig. 3, and discussion on pp. 27-29.
34 Pinner, "Animal Tree," fig. 470.

LARGE WHEEL CARPET

SOUTHERN SPAIN
71 cm x 242 cm

Enlargement of the wheel and spandrel

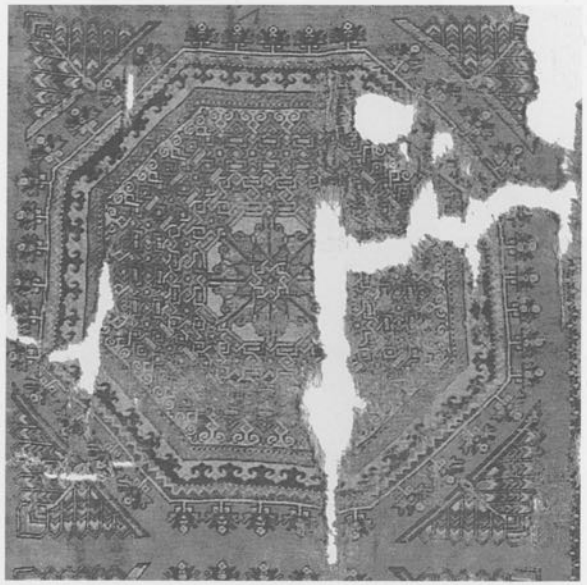


Basketweave checkerboard pattern in the spandrels

This carpet[35] has significance in the formation of a pure, classical, and motionless structure, which reaches a pure unity by modest and quiet means.

The octagons, inside squares, take a form which perfectly balances the octagon and square shape, so that the field continues unbroken. The beautiful drawing of the spandrel, the green, red and light yellow checkerboard pattern, is of extraordinary subtlety. It is a kind of overlapping, alternating net, which produces continuity, again, by the most modest possible means.

35 Another part of what seems to be the same carpet was published in *Lefevre*, catalogue November 28, 1975, Pl. 24.



Giant Turkish wheel carpet, 13th century

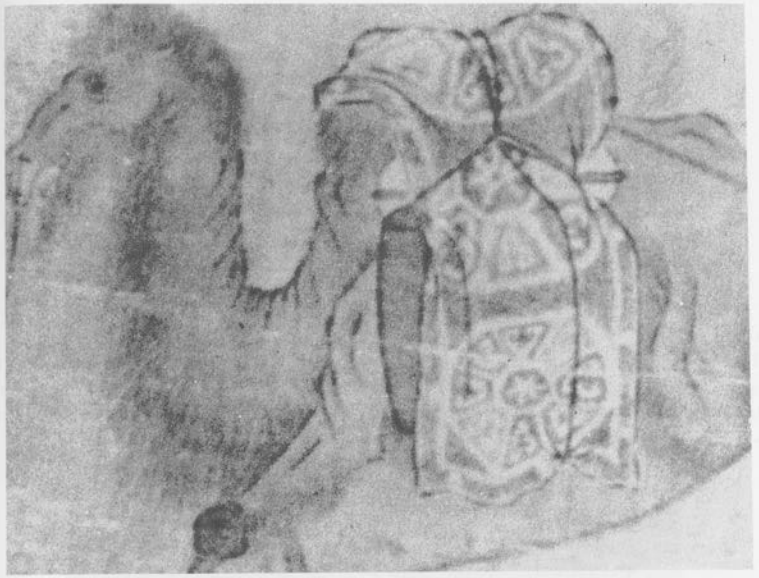
This is almost the simplest way there is of covering the plane with an infinite structure, which has great depth. The uniformity of the alternating repetition of octagons and triangles requires only those smaller inserts and smaller structures to unify the whole.

The view has been expressed frequently[36] that these Spanish large pattern Holbein carpets were *copied* from the Turkish type. I believe it is more likely that the Turkish large pattern Holbein carpets were copied from these Spanish carpets, and that this Spanish type is the progenitor of the tradition. My reasons are rather simple. Careful examination of the drawing in this Spanish type, shows that there is more geometric structure, more subtlety of structure, and more complex structure, than there is in the Turkish versions. For example, the spandrel design in a typical Turkish carpet of this type would be a close packing of little roundels — a design not even approaching the structural complexity of the basket-weave design shown on the previous page. It seems to me, that the Turkish one must therefore be the *derivative*. The only *Turkish* carpet with comparable feel and density of structure is the very early giant wheel carpet.[37]

In general, in the history of carpet evolution, endless repeats of any given design tend to precede the versions in which the same design appears as a centralized form. This is true with star Ushaks, Timurid carpets, ancient Persian carpets, dragon carpets, small pattern Holbeins,

36 For instance by Louise W. Mackie, "Native and Foreign Influences in Carpets Woven in Spain During the 15th Century," *Hali*, Vol. II, No. 2, 1979, pp. 88-95; Hanna Erdmann "Die Beziehung der vorosmanischen Teppichmuster zu den gleichzeitigen Ornamenten," *Hali*, Vol. 1, No. 3, 1978, pp. 228-233; Ernst Kuhnel and Louisa Bellinger, *The Textile Museum Catalogue of Spanish Rugs*, Washington D.C., 1953; Bode and Kuhnel, *Antique Rugs*, p. 36; and others.

37 Belkis Balpinar and Udo Hirsch, *Carpets of the Vakiflar Museum Istanbul*, Wesel, 1988, Pl. 2, p. 181.



Chinese miniature from 1280 showing a similar wheel carpet

Lottos, bird carpets, etc. Now the Spanish version of this wheel design is always presented as an endless repeat. The Turkish version, on the other hand, tends to cases with two octagons or with one centralized octagon. One would therefore again suspect that the endless version — namely the Spanish one — is the predecessor, and the Turkish version the follower.

According to this theory, the Spanish large wheel design appeared from Mudejar sources in the south of Spain, possibly originating in North Africa, and was then shipped to Turkey, where it became the inspiration of the whole group of carpets we now recognize as large pattern Holbeins.

As far as date is concerned, a piece of evidence exists in the form of a Chinese painting from the year 1280. This painting, first described by Ellen Johnston Laing,[38] shows a carpet on the back of a camel. The carpet has three large octagons, in the same format as those in our fragment. Each octagon is made of eight wedges, alternating green and red: the same colors as those visible in this piece. Each wedge contains a linear motif drawn in white. The spandrel of the octagon is a uniform pattern of some kind, in the precise configuration which appears in our carpet. Since the painting depicts a wheel carpet which is very similar, I speculate that this fragment or its cousins, and other similar wheel carpets of the early Spanish type, may very well have been in production as early as the 13th century.

38 Ellen Johnston Laing, "An Oriental Rug of A.D. 1280," *Textile Museum Journal*, December 1974, pp. 82-84.

BLACK BORDERED CARPET WITH GODDESS AND DEER

WESTERN ANATOLIA
122 cm x 176 cm

At first sight this carpet seems unremarkable — not so very different from many other Turkish carpets that one has seen. Only after spending months looking at it, did I gradually become aware of its unusual nature, and of a deep power, which allows us to confront this carpet day after day, without tiring of it.

Goddess and deer from the black bordered goddess carpet

One of the most interesting things in the carpet, is the goddess and deer. In recent years, discussion of the goddess motif in kilim studies[39] has brought forth a good deal of skepticism — even sneering. But in this carpet we not only see the goddess motif vivid and explicit: we also have an opportunity to see how it arises from careful and intense attention to the field of centers.

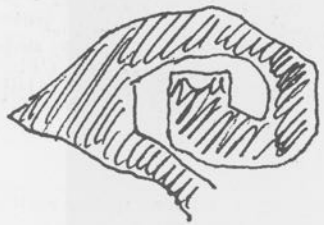
The goddess appears, directly, as a result of the artist's taking a form, and trying to animate it. This does not mean that the artist wanted to portray a goddess, sat down, asked: "What does a goddess look like?" and then tried to draw it. It means instead, that the activity of placing colored knots was done, always, with the desire to animate the forms. Thus gradually, in an almost doodle-like fashion, a head appears, legs appear, arms appear — because this is the way the centers are most easily animated. Thus the goddess appears as

39 Garry Muse, oral communication; Mellaart, et all, *Goddess*; Cassin, *Image, Idol, Symbol*.

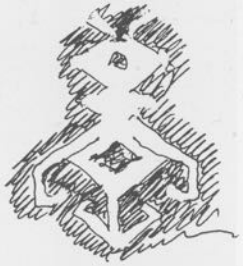
a direct result of trying to animate the form that lives in the knots. She comes about directly, as a result of seeking, and bringing out, the spirit that lies, potentially, in the unformed substance of the carpet while it is being made.

The deer heads look, at first sight, like ordinary latch-hooks. But on closer examination, we see that they are, unmistakably, pointing towards the goddess — as if arrayed on either side of her. And each nose — sharp — and the top of the hook chosen just right to suggest the ear — leaves a definite and clear image of a deer's head.

Thus we have the goddess surrounded by her creatures, at the very center of this carpet. Is it possible, that on later carpets, all the latch-hooks we have seen and assumed to be merely decorative—all derive, ultimately, from this older drawing? It is hard to give a definite answer. But it does seem likely to me that in the older way of drawing, the hooks, like all the other motifs—were animated always, with that life, that gives them the being quality. If one is drawing with that sensibility, then every line, every shape, every color, is chosen to create the being nature, in each form. Under these circumstances it is not possible to distinguish accidental investiture of life that is put into the hooks, with intentional drawing of a specific deer.



Detailed drawing of the latch-hook to form deer's head



The way the goddess is formed by elaboration of centers

In 20th century mentality these two activities would be quite different: differently motivated, and differently carried out by the artist. But in the sensibility of this earlier time, I do not think the two were different. As one drew, one drew life. Sometimes the life appeared in the form of geometric shapes abstractly imbued with life; at other times, fantastic creatures appear; at other times, realistic looking creatures which resemble actual animals appear. But it is all one attitude of mind, which tries to imbue every particle of the made thing with life.

Note the extraordinary similarity of the deer, which may seem schematic, to the highly realistic deer painted on the cave walls of Lascaux.[40]

The color of the carpet is also fascinating. When the carpet was first found, Davina Waterhouse made three separate attempts to mount it—first on canvas, then on black ground, then on an asymmetrical canvas. I was never happy with this mounting because I felt that the real beauty of the carpet was somehow being missed.

After I had looked at the carpet for a long time I recognized that the black border, which remained at that time only in a rather small remnant—must originally have been very large indeed. This was clear from the symmetry of the motif in the main border—which evidently extended twice as wide as the remaining part—thus making the border as wide as the carpet's field.

The idea of the small red field within the immense black border, showed me the carpet in an entirely different light. I found a brown cloth, which approximated the black border of the carpet, and its overall color sensation. When the carpet was remounted (now for the fourth time) on this brown ground, the red field began to glow with the full force and intensity that must have been visible in the original carpet.

40 Lascaux drawing illustrated in Cassin, *Image, Idol, Symbol*, p. 19.

As mounted at first, the fragment alone

As mounted finally, the border shown in proper proportion

Even in a small point like this, it is important to note that the black dye of the border could not be matched exactly. If we had used black cloth, this would have created a solid black zone around the carpet different in feeling from the actual black peppered with motifs and colors. The brown, on the other hand, approximates in a kind of statistical average, the overall color intensity—and when this approximation is correct, then the red of the field begins to glow.

Previously published.[40a]

Deer from the walls of Lascaux, 25,000 BC

40a *Hali*, Issue 53, October 1990, p. 240.

ARCHAIC LOBED MEDALLION CARPET WITH TURTLES IN THE BORDER

SARKISLAR, EASTERN ANATOLIA
157 cm x 222 cm

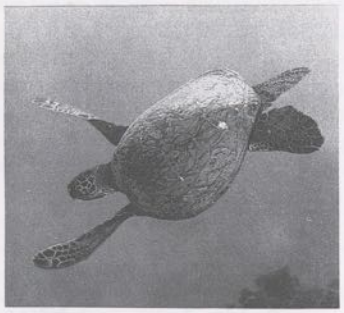
This carpet may be seen as the precursor of the 15th and 16th century Ushak small medallion carpets. It contains several important features.

Most important of these is the fascinating shape of the main medallion. This medallion, which occupies almost the whole carpet, has an extraordinary "being" quality and shape. Of all the shapes I know in the world of design — carpet motifs, buildings, and other forms — it is one of those, which contains the being quality to the greatest degree. Both as an outline and as a detailed structure, it conveys and contains the quality of being to an intense degree.

Unfortunately what is left of the carpet does not show this red medallion fully. I spent months reconstructing it, as carefully as possible, at full size, so that its full shape could be brought back to life in an outline drawn in the backing material.

During the process of redrawing this shape, and studying its detail, I found out a great deal about the source of its power. Such a highly differentiated shape gets it power from the multiplicity of centers *within* the shape. So, the same principle applies to the shape as applies to the whole of a carpet design. The diagram on the following page shows the very large number of centers which occur together within the single shape of the medallion. It is worth checking back and forth to see the individual centers concretely. From this one gains real insight into the way a complex center can be formed.

This fragment was found in Eastern Anatolia. Although an unknown type of carpet, it is closely related, in motifs, colors and feel of the wool and handle, to the 14th century RED AND YELLOW CARPET WITH DRAGONS AND FISHES of this collection.[41] The motifs in this medallion,

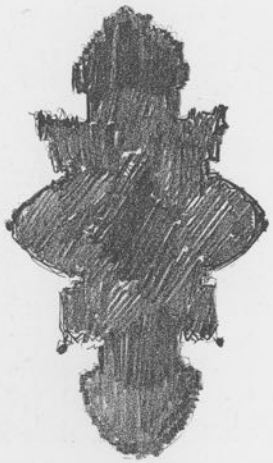


The great green turtle, Chelonia mydas

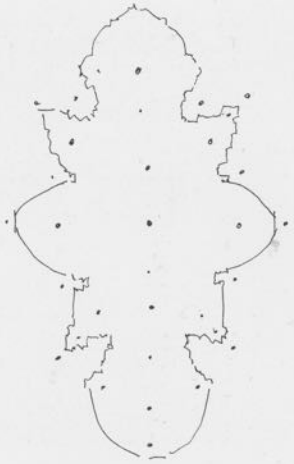
are obviously the same as those in the medallions of that carpet. However, the medallion design itself, is previously unknown to me.

Perhaps most startling and beautiful of all, is the shape of the red field. This red field shape,

41 Page 139.



The shape of the red medallion



Some of the centers which contribute to the beauty of shape

though technically a field and not a medallion, is the single most dominant power in the carpet. Because of its power, I have taken the unusual step of mounting the carpet on a red cloth which completes this shape, so that one can see it in its beauty.

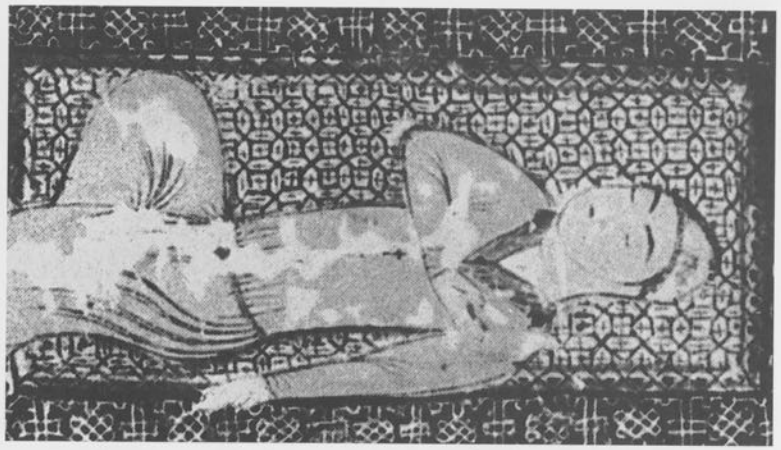
The red shape, coupled with the plain red border, which is not really a border, but an extension of the field shape, has enormous power to hold the eye. It is an outstandingly beautiful example of the field of centers, in its most developed form.

The beautiful blue lattice spandrels, which seem like ordinary diamond trellises, are deceptively simple. They do not occur in any other Turkish carpet but are reminiscent of a lattice of hexagons and octagons which appears in a famous Timurid drawing of the 15th century.[42] The ambiguity and power of this construction, comes about largely because of the spandrels' transparency. Because they are transparent, they leave the border part closer to the field part — and create a single unbroken whole made of fat "lines" — the medallion and its border, all cut out of a single piece of space.

One turtle from the turtle border

The turtle border, though it looks ordinary enough, is also very unusual. These tiny motifs, are very much like the full-scale carpets with an

42 See Kurt Erdmann, *Seven Hundred Years of Oriental Carpets*, Berkeley, 1970, p. 24, fig. 11.



Lattice carpet from Timurid painting

Hexagon lattice in the spandrels

"animal skin" design that occur in the 16th and 17th centuries.[43] As is so often true, a small detail from an early design, gets bigger and bigger as it is copied, and ends up two hundred years later, as the motif of a whole carpet.

It may seem surprising to see the picture of the swimming turtle which appears on the previous page. This would appear to have no place in a carpet book. Further, I do not believe that the turtles in the border of this carpet are actually copied from real turtles. My point is a more comprehensive one. I believe that the process of forming and differentiating centers, described in chapter 11 has produced the turtle form, both in the carpet weaver's art as shown in this carpet, and in nature where we encounter this system of centers as a real turtle. In short, given the nature of space, and the way complex centers appear in space, it is almost inevitable that this particular configuration of centers — archetypal and fundamental — will appear: both in the carpet and in nature — but not because the carpet is copied from nature. It will appear, both in the evolution of a natural species like the turtle, and in the forms which appear in some particular carpet that the weaver is trying to make whole. It is this fundamental nature of a motif — that is meant by calling the motif archetypal.

The inner unity of the carpet comes about, in part, because the big medallion which fills the field and the tiny turtles which surround it in the border are essentially the same design.

43 See for instance, the BLUE ANIMAL SKIN CARPET on page 317.

YELLOW AND BLUE CARPET WITH GRIFFIN AND ARCHAIC BORDER

WESTERN ANATOLIA
171 cm x 262 cm

I think of this carpet as the blue and yellow carpet. Objectively that might seem strange since the carpet also contains a great deal of red, green, brown, white and so on — but it is the incredible yellow border, and the subtle play of yellow and blue medallions in the field, which gives the carpet life.[44]

The border is one of the most fascinating I have ever seen in a carpet. At first it seems simple. Only gradually can one grasp the immense number of overlapping combinations which are simultaneously visible, and created by it. It is archaic, "feels" ancient, and has a tremendous complexity.

The design is similar to the straight line Seljuk tilework on the Karatay Medreseh.[45] There too, a few straight lines form an overlap-

The griffin in the central white star octagon

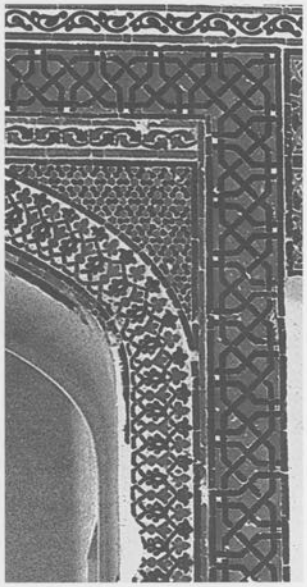
13th century griffin sculpture from Konya

44 The full-size blow-up of one portion of the carpet, on page 14 is well worth studying.
45 See Oney, *Turk Cini Sanati*, p. 21.

Seljuk tilework, Bistam shrine, Persia, 11th century

ping interlock of great complexity. Even more similar in morphological "feel" is the complex Persian Seljuk tilework from the Bistam shrine cloister, shown in the larger illustration on this page. Here the continuous and ambiguous overlapping forms are extremely similar.[46]

In the diagram on the following page, I try to draw attention to the very great number of overlapping structures which are simultaneously present in this border design. As we look more closely, we see pairs of animals dancing, a tree of life design, complex and subtle combinations of triangles, pentagons, hexagons, and so forth. The "wrench" motif, which is visible repeatedly

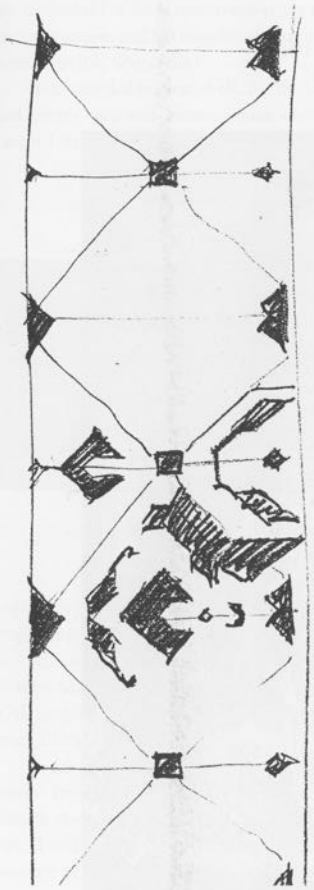


Tile border on the Karatay Medreseh, Konya, built 1251

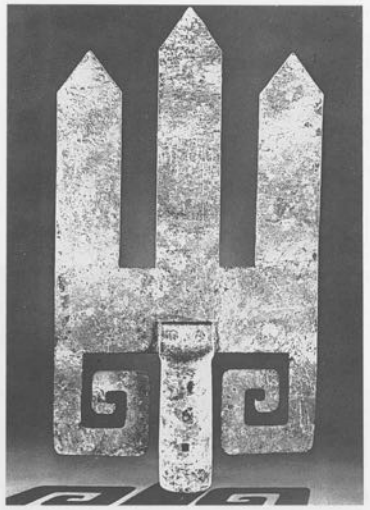
46 Illustration taken from Arthur Upham Pope, *A Survey of Persian Art*, Vol. 8, Tehran, n.d., p. 395.

in the SELJUK PRAYER CARPET,[47] also appears repeatedly throughout the border.

The griffin form which appears in the white star (and which was evidently repeated several



The border scheme



Bronze fork from Zhou dynasty, China, 4th century BC

times in the star) is very similar in its drawing to a 12th century carved stone griffin in Konya.[48]

I have also drawn attention to the prehistoric bronze three-pronged fork, to show its striking resemblance to the motif that occurs in the lappet panel at the end of the carpet.[49] I do not believe it likely that there is a direct historical path connecting the bronze fork with the Anatolian lappet design. My point is that the nature of centers will tend to make this form likely to appear, in any culture, and in any art, which pays attention to the unity produced by centers. Thus the emergence of the bronze fork in China, and the emergence of a comparable form in the lappets of this carpet in Anatolia, are parallel manifestations of the fact that both arise from the artist's spiritual quest for space which is profoundly unified.

47 Page 127.
48 Illustrated in Martin, *History*, p. 109, fig. 275.
49 China, Eastern Zhou, 4th century B.C., shown in Wen Fong, ed., *The Great Bronze Age of China*, New York, 1980, Pl. 92, p. 293.

GREEN CARPET WITH LEAVES

FRENCH WORKSHOPS
177 cm x 47 cm

Green carpet with leaves, Duc de Berry, Tres Riches Heures

Possibly medieval, this is one of three extant fragments of the only green "bird" carpet. I have been told that all three fragments came originally from a castle in Austria.[50] The carpet, which includes the left hand border and a complete strip across the field of the carpet, is extremely archaic in construction, and has foundation warps woven with vegetable fibers (flax).

It is remarkable, first of all, for the intense, and deeply saturated green — quite unlike any carpet I have examined — with the possible exception of the green that occurs in certain Seljuk fragments. Jean Lefevre used to believe that it is 15th century Spanish. Since then Michael Franses has speculated that it is late 16th or early 17th century English.[51] I myself believe it is more likely to be French.

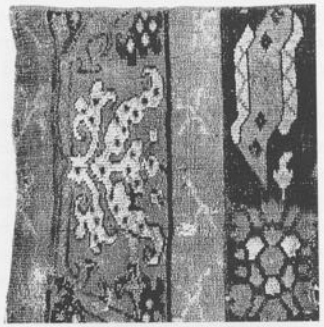
Green pile carpets powdered with pale green leaves are mentioned repeatedly in medieval French documents in the 14th and 15th centuries. The Duc de Berry had, in his inventory, a number of green carpets with leaves. In addition, the Duc de Berry's Book of Hours shows paintings in which carpets with brilliant green dye and leaf forms are represented.[52] Based on the prevalence of green carpets referred to in such sources, coupled with the very unusual green dye of the carpet, and its leaf pattern, I have reached the conclusion — really a wild guess — that the carpet is most likely to have been produced in the workshops of Saracenic weavers who made Turkish carpets in France during the late middle ages. Some additional basis for this belief is contained in an editorial comment that appeared in *Hali*[53] where there is discussion of the fact that medieval carpet workshops, specifically dedicated to manufacture of Turkish patterns, existed in Paris from at least 1180, onwards. If the leaf/bird pattern is, as I believe it to be, a very early pre-Timurid pattern, then it is quite possible that this carpet fragment might indeed be of such manufacture, and would in this case be one of the earliest "Turkish" carpets — even if woven in France.

50 One of the others is now in the Dall' Oglio collection, and the third was owned by Michael Franses. Dall Oglio's piece of this carpet, very similar in size, shape and contents, was previously published in King and Sylvester, *Eastern Carpet*, p. 76, fig. 45. The piece belonging to Michael Franses has also been published in *Hali*, Vol. 4, No. 3, 1982, advertisement p. 78.

51 *Hali*, Vol. 4, No. 3, 1982, advertisement p. 78.

52 The one shown here is from *Les Tres Riches Heures*, painted by the Limbourg brothers, 1410-16, and reproduced in Edmond Pognon, *Les Tres Riches Heures du Duc de Berry*, Paris, 1979, p. 63.

53 Vol. 1, No. 2, 1978, pp. 208-9.



The border element

The base form of the border motif

Spotted character of the border motif

The main border motif of this carpet is its most striking feature. This motif, unprecedented among carpets, has an immediate similarity of "feel" to the spotted cocks shown on the 15th century Anatolian carpet in the Turk ve Islam Museum.[54] This similarity is caused by the similar outline, and the fact of the spots which dominate the design.

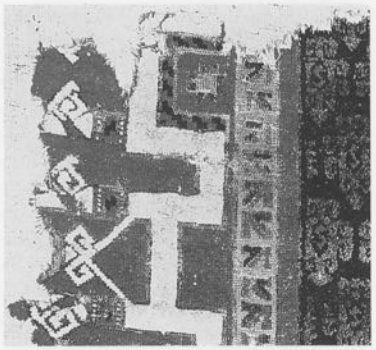
The only textile where I have found a border motif, with almost identical drawing of the figure, is in two different, but related silk twills of the 6th-7th century, both from Syria.[55] In both these instances, we have the same curved major form, and in both cases, the form contains, embraced within it, the same minor tulip or lily form. A similar form appears on column capitals in the Divrigi hospital, 12th century. A related form, but more crudely drawn, appears in the 16th century tilework of the circumcision chamber in the Topkapi[56] where the drawing is also white on green.

The same form in a 6-7th century Syrian silk twill

The minor border of this carpet, is related to the minor border of the great 15th century

54 See for instance, Erdmann, *Seven Hundred Years*, fig. 40.
55 Weibel, *Two Thousand Years*, Pls. 51 and 54.
56 Illustrated Aslanapa, *Turkish Arts*, Pl. XVa, p. 123.

Same motif on a column capital in Divrigi hospital, 12th c.



Seljuk carpet

Beyshehir small pattern Holbein carpet — and to that of the 13th century Seljuk carpet from Konya.[57] Thus, simple as it is, this border also strongly supports the idea of an early date, and reinforces the idea that this carpet, may, after all, be Turkish in design.

The dark spots on white ground ornamentation of the main border device, is in keeping with many other motifs found in 14th century designs, both those that actually exist in carpets, and those found in paintings.[58] There is also a relation in feeling, between the drawing of this border motif, and the drawing of the 13th century Seljuk carving in Amasia.[59] And the same dark spots, on a similarly shaped ornament, also appear on the 11th century carving from Khorassan.[60]

Minor border of this carpet

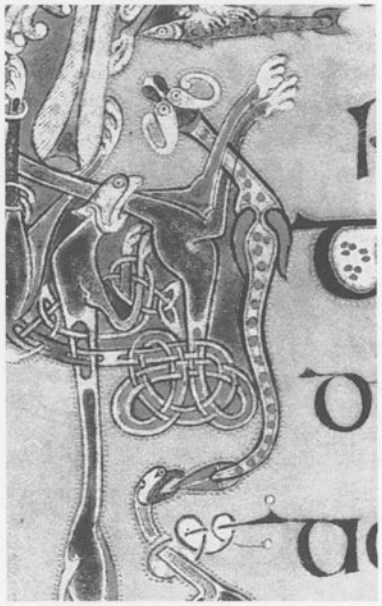
Minor border from the Beyshehir small pattern Holbein

Minor border of 13th century Beyshehir carpet

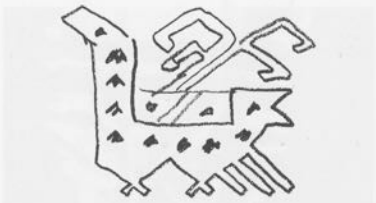
The spotted character of the border element, is, in my opinion, also evidence of an early date. This device arises, certainly, in many early

57 Aslanapa, *Turkish Art and Architecture*, Pls. 19, 15.
58 For instance, the animals in Yetkin, *Turk Hali*, Pls. 17, 20; the painting by Ambrogio Lorenzetti, Erdmann, *Seven Hundred Years*, fig. 35.
59 Illustrated in Riefstahl, "Primitive Rugs," figs. 24, 39.
60 See Titus Burckhardt *Art of Islam*, London, 1976, fig. 18.

Spotted animals in the 9th century Book of Kells

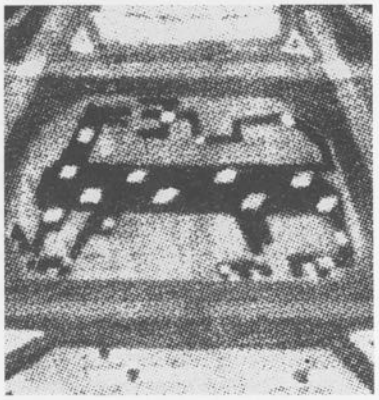


Spotted curving form from the Book of Kells



One of the Konya spotted cocks

carpets shown in paintings, where animals are also presented with similar light dots on dark, or dark dots on light. We also know that this way of decorating long thin animals, was common in the so-called dark ages. Thus for example, the Book of Kells, from the 8th or 9th century, shows fish, leopards, dogs, all dotted in this way that is unmistakably like the carpet fragment which we see here.[61] We see the same form again, in the Sacramentary of Gellone, dating from the 8th or 9th century.[62] And, once more, in the St. Gall Gospel, also 8th century, again the same motif.[63]



Spotted animal in a painting by Ambrogio Lorenzetti

61 See for instance, Francoise Henry *The Book of Kells*, New York, 1974, pp. 117-125.
62 *Ibid.*, p. 217, fig. 69.
63 *Ibid.*, p. 178, fig. 27

Spotted animals and forms from the Sacramentary of Gellone

EARLY CARPET WITH SPOTTED LOBES: THE "OLD" RUG

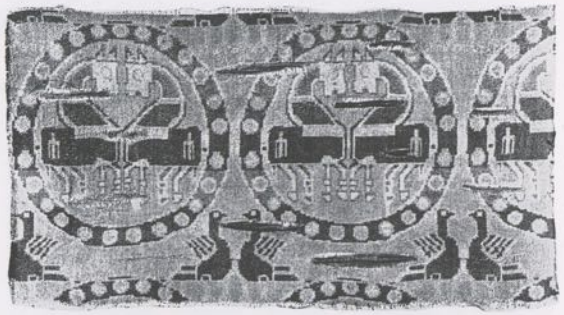
KONYA
128 cm x 253

In a recent article Alan Marcuson, editor of *Hali*, called this his favorite carpet.[64] Alan, Garry Muse and I used to call it "the old rug" because we could not really set a date in our minds, which was old enough to be true — and yet not somehow academically heretical. I remember thinking — can it be 13th century? Is it 14th century? Yet ten years ago it was unbelievable, and embarrassing even, to claim dates like this for such a carpet — so we called it simply the old rug to signify that we knew its age was greater than currently "allowed."

9th century Sassanian textile with large format roundels

The beautifully drawn "cotton balls" are reminiscent of the roundels on Sassanian textiles. The carpet is bolder, more primitive, more fundamental in its physiognomy than many carpets. It has the being or animal spirit, which is the main subject of this book, very strongly in-

64 Marcuson, "Animal Medallion Rug," p. 14-15. The carpet has also been previously published in a *Hali* exhibition editorial, "Reflections of Infinity, San Francisco Hall of Flowers," *Hali*, Vol. 4, No. 4, 1982, pp. 370-371, and later by Christine Klose, "Serapi Carpet," pp. 401-402. There is also a famous carpet in the Ballard collection which resembles it in geometrical organization, but lacks the beauty of color. See James Ballard, *Ballard Collection of Oriental Rugs*, Indianapolis, 1924, Pl. 79, p. 149.



Twill weave, Eastern Persia, 8th or 9th century

deed — so strongly that the carpet might even be seen as a principle example of what this phrase really means, an educational tool which we can use to sharpen our seeing, to educate ourselves, and to lead us in the direction of the primitive animistic force a carpet can contain.

Sassanian embroidery, 9th century

I believe the color quality of the carpet is one of its most important features. The very primitive use of red, yellow and blue, with the stark central medallion, create a force in which we see "pure being" made of the very simplest materials. I think this happens because of the way the color is used to nourish and intensify the centers. Alan Marcuson also sees the spandrel figures as lions. This may be true, but my own love for the carpet, and my belief in its importance and its force, has mainly to do with its profound and simple color interactions.

Similar but lesser rug from the Ballard collection

CARPET WITH BORDER OF LITTLE RED GODS

ALCARAZ
91 cm x 36 cm

This small fragment from what was obviously a large carpet, is fascinating even in its very small scope. The border of human-like figures is intriguing, and unknown to me in other early Spanish carpets. The field design would appear to have been a lattice of great complexity. On page 272, I show a possible reconstruction of the original field design, together with a later Spanish lattice carpet, against which to compare it.

Comparable god figures from ancient Chinese artefact

To me the red nearly-human figures in the border are the most fascinating elements. It is hard to make out if they are manikins, or little "gods," or merely humorous human beings, or even animals or monkeys. They are so geometric, and so lively — almost like totems, and indeed, I believe some totemic character is quite likely.

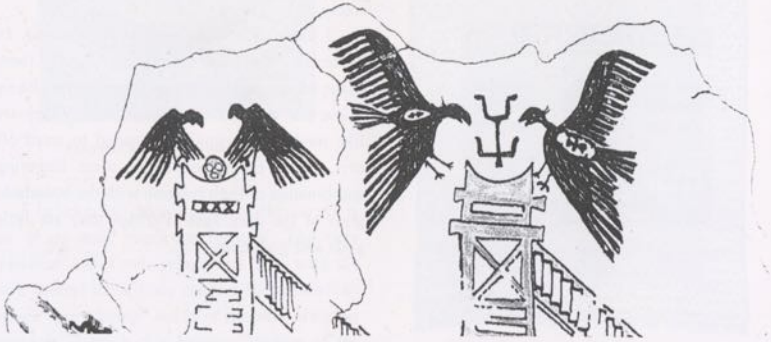
I know of nothing to compare them to. In particular, it is hard to find any basis for them in the Moorish art of Spain. It seems more likely to me that they are Christian, possibly they are like medieval gargoyles, intended to ward off evil, or to encompass evil — some lingering combination of high religion with the household gods of the dark ages. Perhaps they are little gods and goddesses.

FLAMING ANIMAL SPIRIT CARPET WITH VULTURES

KARAPINAR DISTRICT
132 cm x 281 cm

Perhaps one of the most interesting carpets discovered in recent times. It appears to represent a series of giant winged figures, on which animal spirits are dancing or hovering. One of

Similar feeling in Catal Huyuk wall painting



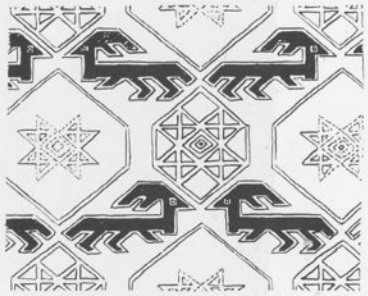
Mellaart's reconstructed wall painting from Catal Huyuk

the most striking things is the movement of the figures which I call the flaming animal spirits. The beautiful jewelled crowns, and smaller birds flying near the central axis, are also very lovely. Altogether, the wing-like arrangement, and the movement of the spirits creates an overall design that ties the space together, and very profoundly causes the "creature" character in the carpet as a whole.

Two-headed eagle from carpet in 14th c. Florentine painting

I do not know if I am being over-fanciful, but I also see some glimpse of the "zikr" in the dancing flaming figures. The zikr is the whirling dance of the Sufis, in which they whirl and whirl, slowly, and incessantly, reaching a state of quiet and perfect tranquil union. This carpet was found in a tekke (an ancient Sufi school), was almost certainly made by Sufis, and it seems to me that the flaming dancing figures somehow represent the zikr directly.

The carpet is one of the pieces in the collection which shows a classical Turkish animal drawing — such as the animal carpets which have been so extensively discussed by Erdmann, Lamm, and others. It is possibly related to the 15th century Konya Museum carpet with chickens or "cocks."[65] Other similar carpets are shown in the 15th century painting by Jaume Huguet,[66] and in the Fostat fragment published by Lamm.[67]

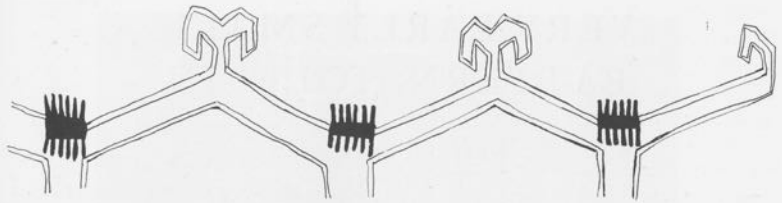


Fostat fragment with animals with similar character

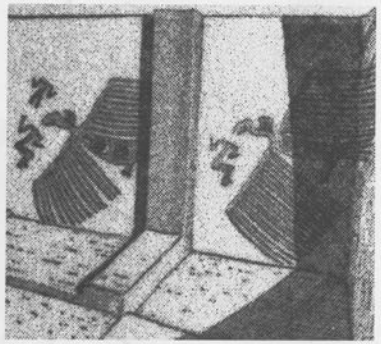
It is important to grasp the geometric power of these carpets, all based on a strange type of bird or animal figure with a characteristic angular quality. The animals appear as geometrical constructions, whose repetition is capable of organizing and unifying space. This is immensely more sophisticated than the "realistic" animals and birds that appear on Safavid carpets. Those,

Vultures on painted pottery bowl, Susa I, 4th millennium BC

65 That carpet is published in Aslanapa, *Turkish Arts*, Pl. XI, p. 45 and p. 32, fig. 19.
66 Yetkin, *Turk Hali*, ill. 7.
67 *Ibid.*, diag. 14.



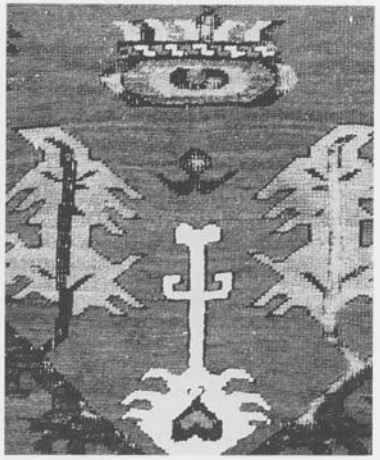
Jack Cassin's reconstruction of vulture motif in a kilim



Vulture wall paintings from Catal Huyuk, 7th millennium BC

Vultures on pottery bowl, Susa, 3600 BC

although beautiful and interesting, have far less power to unify space, and therefore move us on a far more superficial level.



One of the flaming crowns

The extraordinary crowns already mentioned, float, light-filled, as the most powerful centers of all, in the center of the carpet.

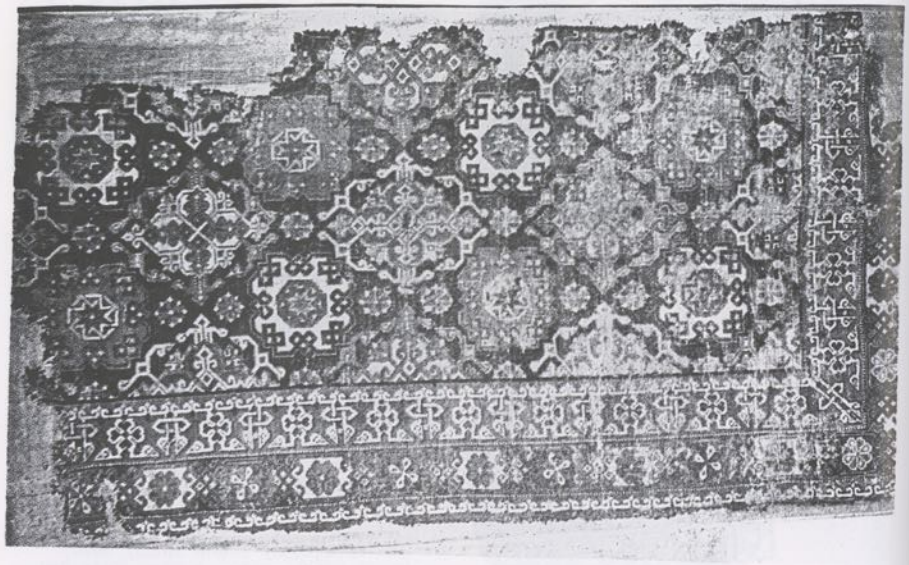
Previously published.[67a]

67a *Hali*, Issue 28, 1985, advertisement p. 45.

VERY EARLY SMALL PATTERN HOLBEIN

WESTERN ANATOLIA
117 cm x 128 cm

One of the most beautiful of all the small pattern Holbeins. This lovely border design was drawn at the end of the 14th or beginning of the 15th century, and now exists in two remaining carpets (one large fragment in the Turk ve Islam Museum shown below[68] and this fragment) and also appears in a painting by Ghirlandaio (shown on page 179).[69] The border pattern has a miraculous grace and simplicity. The more I study it the more I see its grace. What is most interesting to me about the pattern is its deceptive simplicity. To make



Fragment remaining in the Turk ve Islam Museum

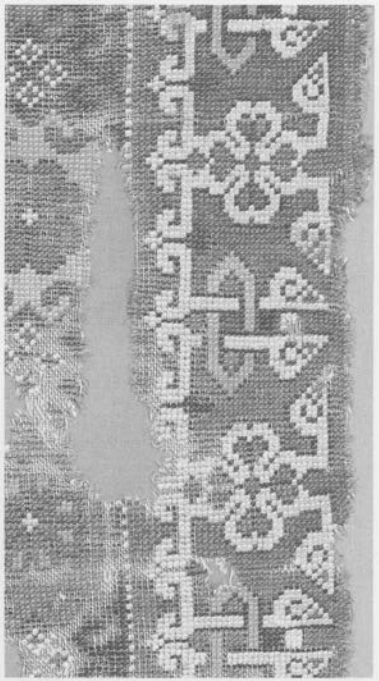
68 See Yetkin, *Turk Hali*, Pl. 27.

69 This particular ornament is described as Type D by Robert Pinner and Jackie Stanger, "Kufic Borders in Small Pattern Holbein Carpets," *Hali*, Vol. 1, No. 4, 1978, p. 336. The painting by Ghirlandaio was done about 1480. As I have explained in part 2 pages 97–100, it is a more sober hypothesis to assume the carpet he painted was 100 years old at the time of the painting, rather than that it was brand new — just as a painter painting today would be more likely to use a 19th century carpet in a painting, rather than a brand new carpet. Hence my judgment that the carpet was woven late 14th or early 15th century.

it clear how crucial the centers are, and how completely the life of any carpet depends on its centers, I shall discuss the design of this border ornament and its centers in detail.

After showing the design to students, I often ask them to draw it. They go home confident that it is easy. Gradually, they find out that it is extremely hard to draw. I show two examples of students' attempts to copy the design. When we look at these drawings, we see that they are not very accurate. The simplicity of the drawing is deceptive. Its exact shapes are hard to catch. This is because the students do not know how to pay attention to the centers. Even when they are trying to see the centers, they often fail to see them all, and are not able to grasp how many centers there are in the design, how densely packed with centers it is. Thus they fail overall to see the centers correctly. And, even after all this talk, they are mostly unaware, how much the life of the design comes from the system of centers. Even after talking extensively about the centers, they still don't really get it.

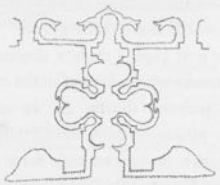
On the next page I show a diagram which shows the centers which do exist in the ornament, when it is properly drawn. As we see in the diagram the pattern contains literally hundreds of different centers. Some are small. Some are quite large, almost as big as the whole pattern. In the student drawings most of these centers are missing.



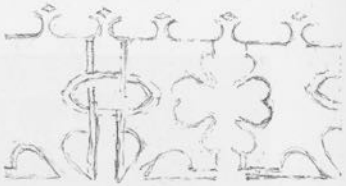
Border ornament of the design

As a result the grace and profound feeling in the carpet is missing from the student drawings. There is an image or impression of the pattern, but the deeper feeling is not there.

Sometimes, after explaining these points, I ask students to try and draw the pattern *again*. But



Inaccurate student drawing of the ornament



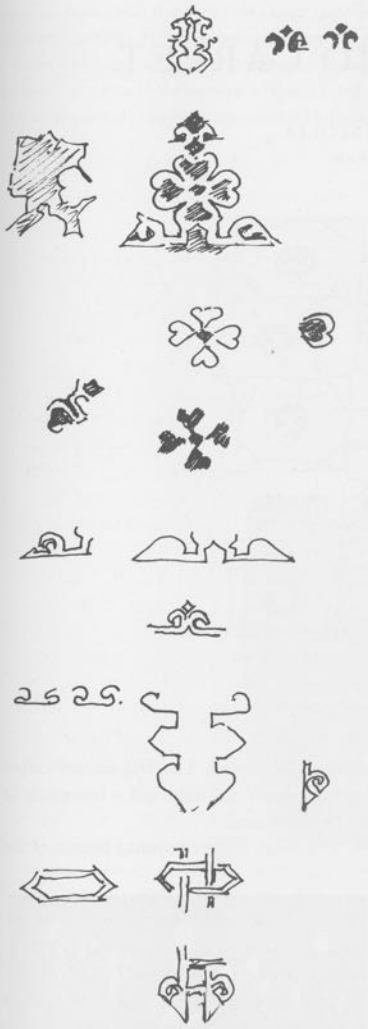
Another inaccurate student drawing of the ornament

even the second time, after seeing all the centers which are in the pattern, they often fail to draw the pattern correctly because they *still* do not draw the *centers*. This happens for two reasons.

First, they still do not fully realize that the life of the pattern, the life of the rosette shape, the life of all of it, comes from the centers. Thus, they try to copy lines, curves, shapes — but do not concentrate on copying centers because they do not understand that everything that is important and valuable about the pattern lies in the structure of its centers.

Second, drawing the centers is extremely hard to do. Even once they see the centers and recognize how important they are, they try and try to draw them but cannot actually get all the centers to work. This happens because it is geometrically complex, and takes enormous skill and coordination to draw the pattern so that all the centers at once come forward and have their existence.

Drawing all these centers at once, requires a mode of perception unlike the one we are used to. Each pencil stroke in the drawing — and each knot in the actual carpet — must be creating as many as half a dozen of these centers, when the design is working properly. It is the simultaneous attention the weaver pays to these centers that governs the color of each knot, and its exact position. Suppose, for instance, that I am putting in one part of the pattern and am placing one particular knot — one dot of color. As I place it I have to be aware of all six of these centers. In the next instant, as I place another knot, I may have to look at eight *other* centers —



The many centers present in the border ornament

different ones — which are affected by this second knot, and which must all be created by *that* knot.

To have the multiple parallel vision which is required to see and pay attention to all these centers at the same time, while I place each knot, requires blankness and enormous flexibility of vision. Above all, it requires a wide-open-eyes mode of perception, in which I see the whole system of centers in its wholeness — all at once. But the trouble is that in modern times we just aren't used to paying attention to the wholeness with such energy. This was a particular ability, normal at the time of the great religious period, when people were more used to looking at, and seeing, wholeness.

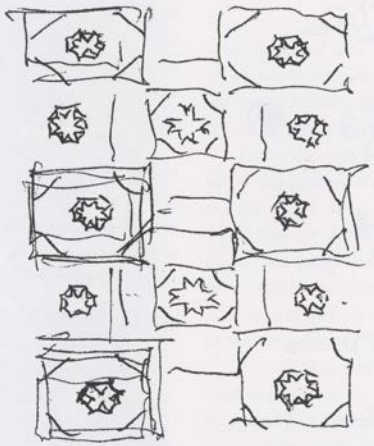
And further, it takes considerable mental discipline to recognize that the simple grace of the pattern comes about because of the density of centers. The rosette is beautiful, *because* it produces so many centers. The whole design is graceful

Painting by Ghirlandaio, 1480

and profound *because* of the density of centers it contains. That is why this pattern has such blithe simplicity, such a deep and almost deceiving grace. The system of centers is not just a nice way of talking about ordinary structures. It is the structure which gives the carpet its life.

GHIRLANDAIO CARPET

WESTERN ANATOLIA
68 cm x 138 cm



Organization of the complete carpet

This fragmentary carpet is similar in character and execution to the carpet shown in another famous painting of Ghirlandaio's. Oddly, it has the physical characteristics of some of the Fostat fragments in Stockholm. It is tiny in scale, both in the size of the full carpet, and in the execution of the details. It shows similar motifs and has the same range of colors as the Fostat fragments. It has the same wiry, shiny wool. It has the same tiny knots.

I was astonished when I handled the Fostat fragments because they suggested to me, something I had never seen mentioned in print, namely, that some of these early Fostat fragments seem to have come from a generation of carpets which were much smaller in physical size, and scale of drawing, than the later carpets we know as classical. This fragmentary carpet has this sense of tiny scale, and is interesting to me for this reason.

The design is also fascinating because of the

Carpet in Ghirlandaio's Virgin Enthroned, painted c. 1450

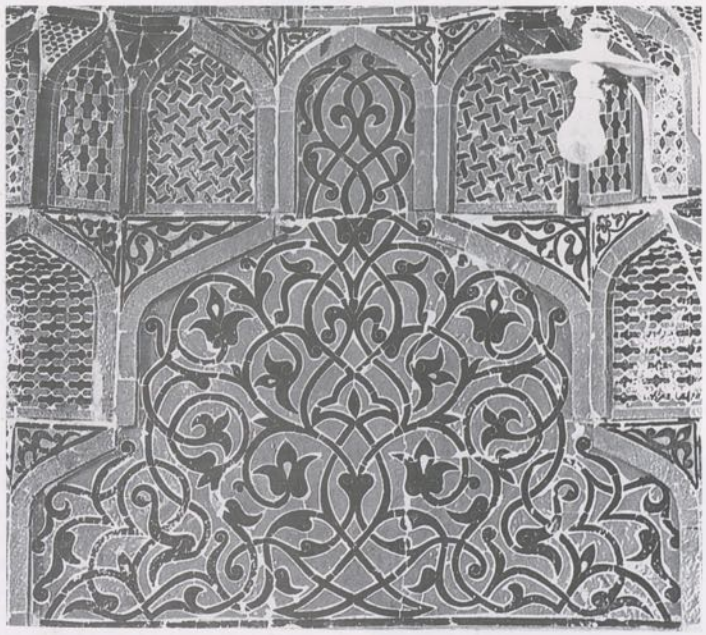
possible connection it makes to the large pattern Holbein carpets. At first it seems that we have a pattern of large octagons in boxes surrounded by small octagons in the corners: a typical 2-1-2-1-2 arrangement, like the large pattern Holbein carpets in Berlin and Istanbul. However, when we examine the design carefully, and reconstruct the full design from the fragment, we can see a repeating pattern of rectangular boxes, shifting half a box in each row, and all containing octagons. Further, the star octagons which the boxes contain, make a very subtle changing pattern with the repeating rectangles.

The unity of the carpet, comes mainly from the very subtle interplay in the similarities of the overlapping and interlocking rectangles, which appear similar, but actually fall into three different types. The difference in size between the central octagons and the outer ones is very slight, thus reinforcing the view that this is an endless design, rather than a centralized design. The beauty of the design comes from the wavelike movement of the small star octagons, as the design moves up the carpet.

MEDALLION CARPET WITH ENDLESS RUMI DESIGN

TABRIZ
224 cm x 588 cm (complete)

This carpet contains an archetypal design, the Rumi lattice, which occurs in many other kinds of Turkish and Persian art during the 11th to the 15th centuries, and may have existed even earlier. One of the most basic and famous examples of this design was made in the blue and black tilework of the mosque of Sahip Ata, in Konya, in the year 1258.[70] Once again, like many other examples in this book, this beautiful and archetypal motif appears in the town of Konya. The pattern, which many people presently think of as Persian, clearly belongs to the same



Rumi tilework in the mosque of Sahip Ata, Konya, 1258 AD

70 Illustrated in Esin Atil, *Turkish Art*, New York, 1980, Pl. 34.

The whole carpet

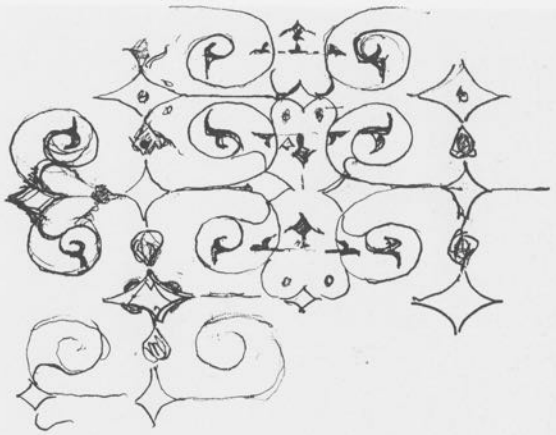
Sufic tradition as so much other art from the region. It comes not primarily from some specialized "court" art, but from a universal and highly spiritual composition, which underlay many of the designs produced in the visual arts during the 10th-15th centuries in Turkey and throughout the Middle East.

The pattern's essential character is created by an ascending series of giant arrowhead blossoms,

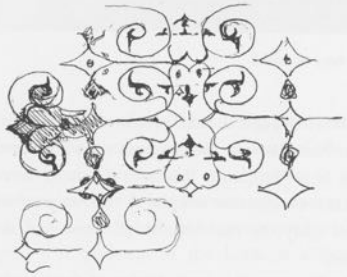
Interlocking overlapping flowerheads in the Rumi design

interlocking and overlapping, formed as the residue of a system of spirals and other minor centers. The great arrowhead blossoms are lost in the design, and appear ambiguously, again and again, like faces in the clouds. The spirals and minor centers are made in such a way as to produce this profusion of arrowhead blossom forms.

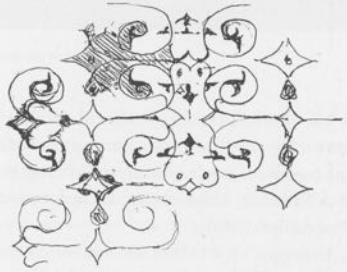
Whirling motif on a tile from Rustem Pasha mosque



The basic layout of the Rumi design



First hidden arrowhead blossom



Second hidden arrowhead blossom center

If we compare the design of the carpet with the design of the 13th century tilework of Sahip Ata, we see that the carpet design seems to have less structure, and less complexity of centers than the tilework — consistent with the fact that it is later and more degenerate.

Nevertheless, the beautiful enormous flowerheads, which appear again and again, interwoven and hidden throughout the design, are clearly visible. Both in the tilework, and in the carpet, they appear in many different versions, at different points in the design, all overlapping and interlocked as they are laid onto and into the endless twirling of the spirals, flowers and split leaves. The carpet may be one of the few remaining artifacts where the overall layout of the Rumi design is visible in full and can serve as a diagram for understanding its complexity. The Rumi design sheds great light on the way in which an apparently spontaneous and inspired work of leaves and spirals and flowers is actually a carefully worked-out structure.

Portion of the field design, lying on its side

The vast and complex design of the Rumi intertwining scrolls contains the origin of the Lotto carpets, of the dragon carpets, of the great Seljuk ascending blossom palmette design, and the medallion Ushaks.

Erdmann[71] and others say that we do not know where the Lotto design comes from. Yet this Tabriz carpet shows, almost certainly, that the Lotto field design comes directly from the field design of this type of 15th century Rumi carpet, or from some comparable and earlier type of the same design — possibly existing in Turkey itself.

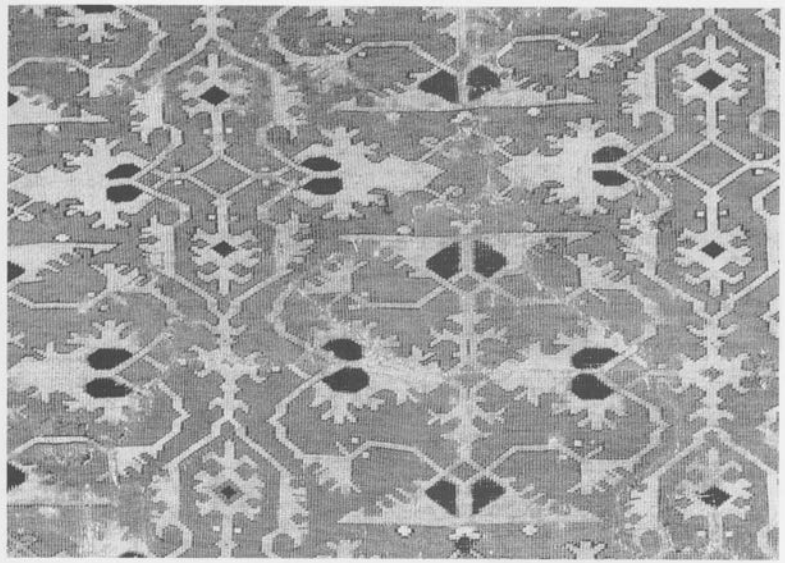
To bring the Lotto design and the Rumi design into a clear relation, we must first rotate the Rumi design through 90 degrees from its normal orientation — thus turning it sideways. In the pair of illustrations above and on the following page, I have presented a portion of the Rumi design, and the exact same portion of the field design in the LOTTO CARPET WITH GREEN CHAINWORK BORDER so that we may see and study the near-identity of layout and design.[72]

To grasp this near-identity of the two designs, it is helpful to concentrate on the rectangle which appears in both. The appearance of this rectangle in both designs — in both cases formed by a pair of triangular forms on each side — is what first gave me the clue that the two designs are related.

If we examine the various parts of the Lotto design, item by item, we see that *each* part corresponds to a more complex and subtle part in the Rumi design. The basic "star" of the Lotto is a larger lobed star, which appears within the

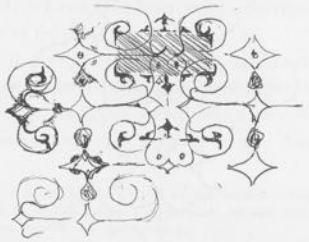
71 Erdmann, *Seven Hundred Years*, pp. 59-60.

72 The Lotto carpet used in this illustration is the LOTTO CARPET WITH GREEN CHAINWORK BORDER on page 229.



Comparable portion of the Lotto field design

curved tendrils of the Tabriz. The basic "octagon" of the Lotto is a group of four spirals of the Tabriz. The triangles which appear in the Lotto, above and below the rectangle, appear in the Tabriz as slightly more ornamented triangles. The palmette of the Lotto is a lobed



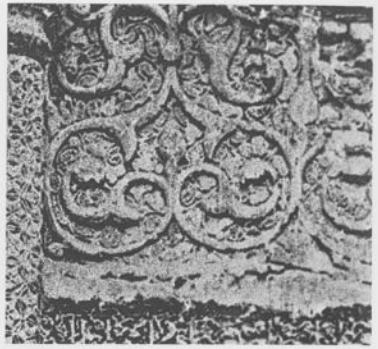
The rectangular box we can see in both designs

by-product of the Rumi swirls in the Tabriz. Overall, we may see the correspondence most clearly, by recognizing that each design is an endless repeating grid of four distinct centers, each one formed by a curvilinear diamond, each of the four diamonds different.

The idea that the Lotto design originates with a northwest Persian Tabriz design, is consistent with the fact that Ottoman artists and weavers visited Tabriz during the 15th century. It has also been noticed, many times, that the eight-pointed star of the star Ushaks and the sixteen-pointed star in the subsidiary medallion of the medallion Ushaks both seem to originate in the great sixteen-pointed medallions of the Tabriz group — and have even been associated by Jon Thompson specifically with the sixteen-lobe medallion of this particular carpet.[73]

73 Jon Thompson, "The Sarre Mamluk and 12 Other Classical Rugs From the Same Private Collection," *Lefevre*, May 23, 1980.

10th century version of Rumi blossom, Masjid-i-Jami, Nayin



12th century stonework from the Alaviyan of Hamadan

Knowing that the Lotto design originates with the Tabriz design only reveals a more fundamental problem. It still leaves us wondering about the origin of the Rumi design itself, and about its possible "meaning."

Here, we get some help from the theory of centers. I believe that the Rumi field design, the endless repeat of spiral scrolls, is one of the most sophisticated patterns ever invented to create unity in the plane. It is simply *packed* with centers. It contains a veritable plethora of centers, densely packed, capable of almost limitless interpretation, modification, and further ornamentation. Like a rich theme that becomes the basis of many different fugues, the Rumi scroll became the basis of gener-

Phallic version of flowerhead blossom, Phoenician, 8th c. BC

The flowerhead which forms the basis of the Rumi design

The forked leaf design is a necessary by-product of centers

ations of different ornaments in carpets, in tilework, in stone and in illuminations.

The extreme age of the arrowhead blossom, which forms the basis of the Rumi style, may be seen in this Phoenician ivory carving which shows it as a phallus in a sexual union. This carving, dating from the 8th century BC, shows the arrowhead motif in its full form more than two thousand years before the time of the carpet. I believe that this motif enjoyed such a widespread importance because combinations of this design can be made to approximate almost any living thing. It thus creates a kind of schematic template with which one can draw an amazing variety of forms. The Rumi style, is the embodiment of this idea.

On page 185 we see we see a diagram of the basic Rumi lattice as it occurs in the carpet, with two diagrams where we see shaded two of the blossom-centers which appear in this design. These ambiguous blossoms appear unexpectedly — in the same way hidden tigers appear in trees in popular children's puzzles. The lattice of centers and spirals turns out, on close examination, to contain various unexpected blossom centers. It is the existence of these ambiguous and overlapping centers that is responsible for the beauty of the structure.

I would guess its floral details were created entirely to produce complex multiple centers. Thus, for example, the forked leaf — one of the most recognizable features of Rumi art — appears in the design *in order to attain a specific aim*. It is not a leaf, not a mysterious symbol, but a structure which appears *necessarily* as a way of producing several centers in the highly complex layout of spirals which forms the Rumi lattice — a rectangle and the tail-end of the spiral tendril. The seeming leaf-shape is not intentional as a leaf shape but is a by-product of a deeper intention which is structural.

This particular carpet has been published many times.[74] It is one of a type, of which three or four other examples still exist. Others are in the Hamburg Museum in Berlin, in the Textile Museum in Washington, and in the Victoria & Albert Museum. They are described in Erdmann.[75] This example is apparently the oldest of the surviving examples, since it includes the most complete version of the Rumi lattice in the field. As a result, in this carpet we have the opportunity to study the meaning and significance of the great design which this series of carpets embodies.

It has generally been accepted that this carpet comes from the late 15th century.[76]

74 In Volkmar Gantzhorn, *Der Christlich Orientalishe Teppich*, Cologne, 1990, pp. 377-79; *Lefevre*, catalogue for October 5, 1979, Pl. 24; in Elio Cittone, *Tappeti Antichi*, Milano, 1982; in Thompson, "Sarre Mamluk," p. 36, fig. 4.

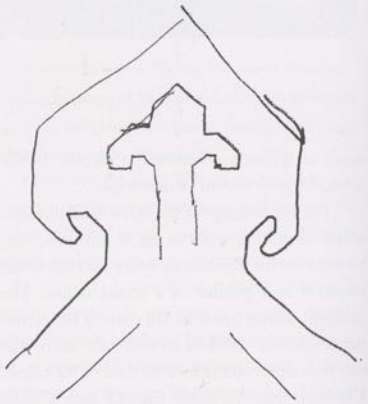
75 Erdmann, *The Oriental Carpet*, pp. 32-35.

76 See *Lefevre*, 1979 catalogue, Cittone, Gantzhorn, and Thompson *op. cit.* However, it is extremely hard to say when it really was made. At some time in its history — perhaps while Barbieri owned it during the early 20th century, or perhaps even earlier — the carpet was extensively reconstructed. As a result, it is now very difficult to assess the date of the original weaving. The weave varies throughout the carpet, and original knots and original foundation only exist in fairly small areas, so that most of the colors and wool no longer date from the 15th century. As far as I can tell, the design remains intact, and accurate to the original drawing.

ARCHAIC ARROWHEAD BLOSSOM CARPET

USHAK
109 cm x 159 cm

The Berlin carpet



The arrowhead motif

16th century Isnik tile

This carpet closely resembles a famous piece in the Berlin Museum of which Bode and Kuhnel wrote their memorable line: "Many of them do hark back to extraordinarily rare and ancient prototypes."[77] Like the Berlin carpet, it has at its core a giant arrowhead blossom motif of the kind visible on Seljuk stonework, and also visible in the Tabriz MEDALLION CARPET WITH ENDLESS RUMI DESIGN.[78] It is actually a double arrowhead, a small one inside a larger one. The arrowhead has "ears" — like the main figure in the BYZANTINE-TIMURID PROTOTYPE of this collection.

77 Bode and Kuhnel, *Antique Rugs*, p. 59.
78 Page 183.

Unlike the Berlin carpet, this carpet is apparently symmetrical with a centralized medallion whose shape is not unlike the medallion shape of the ARCHAIC LOBED MEDALLION CARPET WITH TURTLES IN THE BORDER, which I have discussed in chapter 13.[79]

It is significant to see such a pure form of the arrowhead blossom, which also appears by itself in 16th century Isnik tiles.[80]

79 Page 155 and discussion on pages 80 and 82.
80 John Carswell, "Ceramics," *Tulips, Arabesques and Turbans*, Yanni Petsopoulos ed., New York, 1982, pp. 72-119.

THE WAVING BORDER CARPET

KONYA DISTRICT
154 cm x 254 cm

This almost completely preserved carpet of the 15th century is one of the more powerful in the collection. In format similar to members of the famous large pattern Holbein group, some elements in the carpet suggest an earlier date, and that this carpet might be regarded as a precursor of the group.

In layout — central octagon with four surrounding octagons — the carpet is closely related to the large pattern Holbeins. However, artistically, the carpet achieves something very unusual in the field of centers. The centers are more animated than in most early carpets, as though an endless waving motion creates the stillness at the center. The wave of the border, the astonishing symmetrically placed wave elements, vibrate to create the main feeling of the carpet.

This vibration, caused by a perfectly symmetrical and balanced form of wave, is unique among carpets with this border.

The fact that the border has a near-to-perfect corner solution is also unusual — among Turkish carpets this occurs mainly in carpets found in early fifteenth century paintings. The animal forms found throughout the carpet occur, for example, in the border of the carpet with multiple birds in the Turk ve Islam Museum. The star octagon elements in the border, are direct transcriptions of the border found in several 13th century Seljuk carpets. This border element alone, not found to my knowledge in any other later carpet, is enough to date the carpet to the 15th century; my guess is that it probably came about a century after the later Seljuk carpets themselves were made.

Garry Muse, inspired by his study of early kilims, believes that some of these elements are to be read as goddesses flanked by animals. Although I am not sure of this idea, the carpet does create an overall vibration of animal-like forms and substance — something similar to the zoomorphic character of Seljuk stone carvings.

A further important aspect of the carpet's design, lies in the main border motifs. At first sight this border appears familiar. Something like it is common among Anatolian carpets, both classical and non-classical ones. Then one notices that the border seems crudely drawn, as if it were in the process of degeneration. For example, the space between the white lines, is more beautifully shaped in several carpets of the 16th century. This would lead to the idea that the carpet

Interaction of the figure with the waving border

might be a later carpet — i.e. from the 17th century.

But what we are seeing here is not this border in a stage of *de*-generation — it is in the stage of *generation*, of *formation*. When you look at it

The "hook" centers and the line connecting them

carefully, you can see that the main emphasis is not on the undulating vine line, but on the small double-hook motifs near the inner and outer edge of the border. The rest of the "vine" line is really there to hook up these centers — and these centers are an outgrowth of the two main forms which appear as border elements.

Thus the sequence of generation goes like this. We get the main border motifs — one of them from the star octagons of Seljuk borders, the other from a longer tradition of animal and human figure motifs. These two elements are placed, multicolored, in the border, alternating and in opposition to one another. Then each is finished, given a "head," by means of another center, a double-hook motif drawn in white. Then, a further set of z-lines is drawn, in white, connecting these double-hook centers — and this produces the idea of a border of this type.

In later carpets the type becomes stylized, the complex shape becomes established, and the two double-hook motifs disappear, along with the Seljuk star octagon form which initiated it. Another surprising thing about the carpet is the indentation of the border into the field. At first sight this is reminiscent of 15th and 16th century re-entry carpets. But it is really quite different.

Above all, the field is totally different. What we see here does not even look like a field in the conventional sense. It is not a red field surrounded by a border. Rather, the red indented shape seems like a plane hovering above a larger

One of the border figures of this carpet

1st millennium BC

Figure from early kilim, goddess

brown plane — the brown zone of the carpet which includes the space we call the border.

This is a totally different approach to the design, and one which goes far to creating the shimmering unity that is so startling in this carpet.

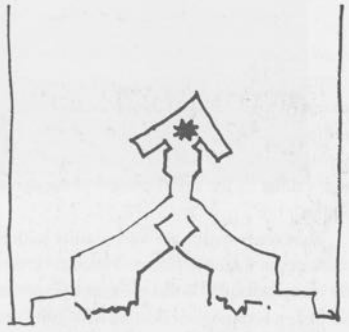
Finally the way in which the border elements give rise to the triangular pyramidal indentations, and the unique shape of the indentations themselves, reaching towards the

Goddess figure

central octagon, creates a sense that we may be looking here, at one phase in the birth of the prayer rug form.

The beautiful pale blue color of the minor octagons, on other carpets would be by itself enough to place it on a list of interesting carpets. In this crapet it comes like a minor footnote at the end of the list of this carpet's extraordinary features.

Previously published.[80a]



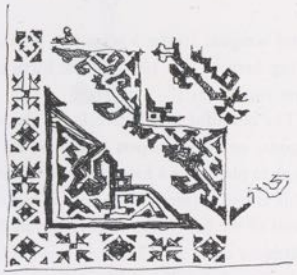
The re-entrant motif — not unlike the goddess

80a *Hali*, Issue 53, October 1990, p. 241.

TWO PANEL CARPET

WESTERN ANATOLIA
133 cm x 170 cm

What is most fascinating about this classic two-panel Holbein carpet of an early type is the extreme unification caused by the ambiguity and interlock of the field and its motifs. To begin with, the fact that the inner border, the diamond-shaped fields, and the inner rectangles,



Play of light and dark which forms the basic structure

are *all* carved out of one continuous yellow field, is extraordinary. The various boxes, diamonds, rectangles, and octagons are not sharply bounded entities as they typically would be in other carpets, but almost illusions which float in the field, caused by the subtle tracery of the corner motifs.

The corner motifs are very similar to those which occur in small pattern Holbein carpets. My instinct though, is that these motifs antedate that design because their floating ambiguity produces an order that is more subtle and complex. It seems as though the tracery must have been conceived for this purpose and then later copied and used for the other. The beautiful small pattern Holbein design even seems rather ordinary or mechanical, by comparison with the floating and mysterious quality of this carpet. This is created by the way that figure and ground are inextricably interwoven. The main forms of the carpet are not drawn or delineated or bounded. Instead the yellow, which shows through and is the field, sometimes appears as solid as the blue and red forms of the tracery. At other times the yellow is more solid, and comes forward. At other times, the tracery seems to group itself, and the floating pieces attach themselves to one another to form definite solid forms, which then float on top of the yellow ground. We see an example in the thin yellow line around the central box in each panel. It stands out as a distinct and separate boundary. But when we look

Similar carpet from the Turk ve Islam Museum

closely, we see that it is continuous with the field — the illusion of its separateness is created only by the drawing and spacing of the various curlicue motifs.

The way that solid and void interpenetrate, and the almost ghostly character which the forms of the carpet have as a result, is a mark of the highest sophistication. It is this which gives the carpet its fascination.

One similar carpet exists in the Turk ve Islam Museum. It has been illustrated many times.[81]

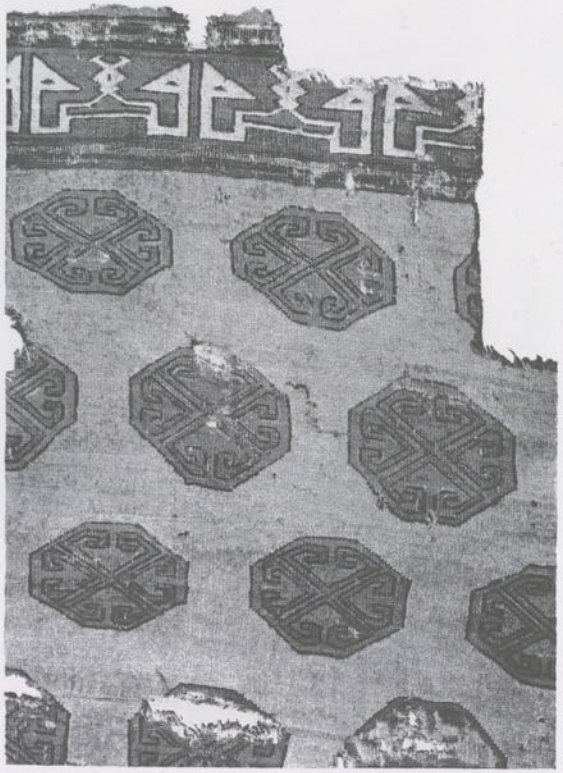
81 Erdmann, *Der Orientalische*, Pl. 38, and Yetkin *Turk Hali*, ill. 61.

SELJUK GUL CARPET

KARAPINAR
113 cm x 147 cm

From the point of view of abstract structure, the most remarkable feature of this carpet is its extreme compactness of design, in which every single particle of space is well-formed and functions as a center — so that the carpet is a supreme example of positive space and multiple centers.

We have a near-perfect distribution of centers — at the scale of the carpet, at the scale of



Seljuk carpet with the same gul, Beyshehir, 13th century

the field, at the scale of half the field, at the scale of the three medallions, at the scale of the bars between the medallions, at the scale of the cartouches in the border, at the scale of the octagon guls, at the scale of the smaller octagons between the medallions, at the scale of the triangles between the cartouches, at the scale of the triangles which make up the Seljuk guls themselves, at the scale of the flower motifs within the cartouches, the whirling stars within the octagons, the arrowheads within the triangles that form the Seljuk guls, the rhombs of brown space at the four ends of the cartouches, the multicolored flowers in the triangles between the cartouches, the individual orbs in the flowers within the cartouches, the latch hooks that form the base of the arrowheads in the Seljuk guls, the narrow lines forming the guard strips between borders, the small rhombuses forming the stars in the octagons, and down to the very smallest triangles of all in the flowers between the cartouches and in between the points of the stars in the octagons. This dazzling display of levels — although simple and almost severe — is rarely equalled, in

any other, even in very large carpets, like northwest Persian medallion carpets, which evidently have an immense array of structure. The discipline, simplicity, and enormous complexity of space that is achieved in this tiny carpet, is absolutely fascinating. And it is all the more fascinating, because at first sight the carpet is so simple.

Individual gul from the Seljuk carpet

Gul of this carpet

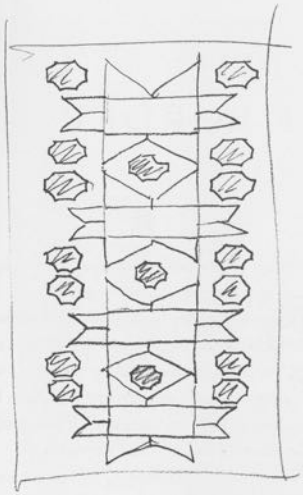
I was first offered this carpet at the same time that I saw the STAR CARPET WITH FLOWERS — and under those conditions failed to see all this immense array of structure — and even passed the carpet — lost it — and then managed to get it again, after countless adventures, and after the carpet had passed through three other people's hands in between. I now regard it as one of the most fascinating carpets — exactly because of this structure which I have just tried to describe. Judging by weave and color, this carpet must come from the same district and approximately the same period as the STAR CARPET WITH FLOWERS.[82]

From a historical point of view the most striking feature of the carpet is the presence of the Seljuk gul. This motif, repeated three times in the field, is the same motif that appears in the famous ivory field 13th century Seljuk carpet in the Turk ve Islam Museum.[83] As far as I know this is the only other appearance of this motif in a Turkish carpet. The minor border stripes are also like those in the Seljuk carpet, with very similar colors.

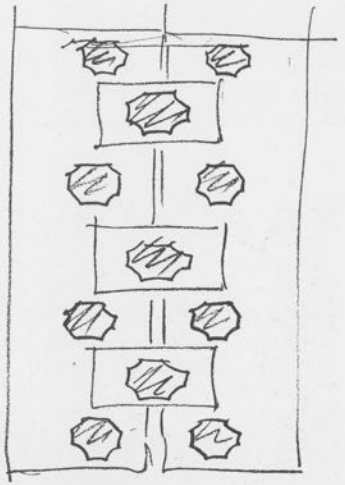
There also seems to be a strong relation between this carpet, and the famous village carpet, now in the Berlin Museum for Islamic Art.[84] The size and format of the carpet are similar; the rather hard wool is the same; the overall format, in which small octagons, filled with stars, are distributed in an in-and-out arrangement with regard to a central motif, and the relation between the outer octagons to the three inner octagons — and the bold use of unbroken one-color lines as guardstripes — all these point very strongly to a similar date and origin.

Previously published.[85]

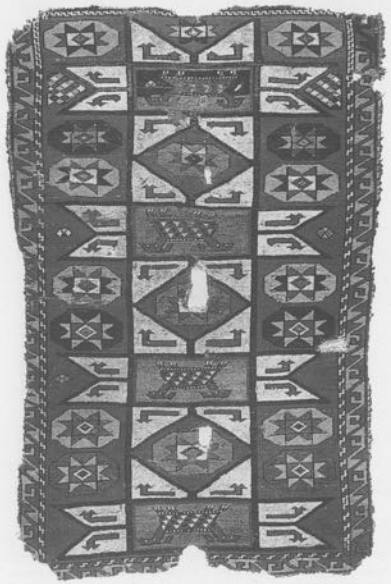
82 Page 213.
83 Illustrated in many places, including Erdmann, *Seven Hundred Years*, fig. 23; Bode and Kuhnel, *Antique Rugs*, fig. 1; Aslanapa, *Turkish Arts*, Pl. IV, p. 36.
84 Illustrated in W. Bruggemann and H. Bohmer, *Teppiche der Bauern und Nomaden in Anatolien*, Hannover, 1980, Pl. 56.
85 *Hali*, Vol. 2, No. 2, 1980, advertisement p. 67 (with totally incorrect colors).



Layout of Berlin carpet



Layout of this carpet



Early carpet in East Berlin

CARPET WITH WHIRLING LEAF BORDER

KONYA
148 cm x 234 cm

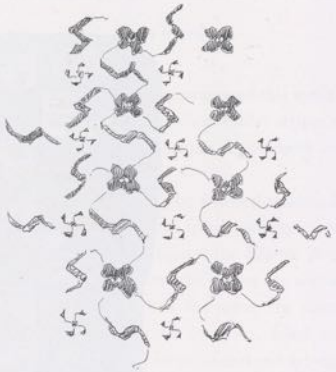
The only other carpet of this type known to me was found in the Divrigi Mosque, and is now in the Vakiflar Museum. A full black and white picture of it is published in the rare collection of papers on the Divrigi Mosque.[86]

Divrigi carpet

The border of the carpet is fascinating for its graphic power and sense of movement: A system of many-colored whirling leaf shapes, forming spirals, which move constantly. The color is brilliant: orange yellow field, with deep purple, light green, dark blue, red and white spirals.

It seems to me very likely that the border was, at some earlier stage, itself a field design. It is also hard to avoid the impression that the Sufis, who almost certainly made this carpet, must have had a connection in their minds, between this design, and the dance of the whirling dervishes.

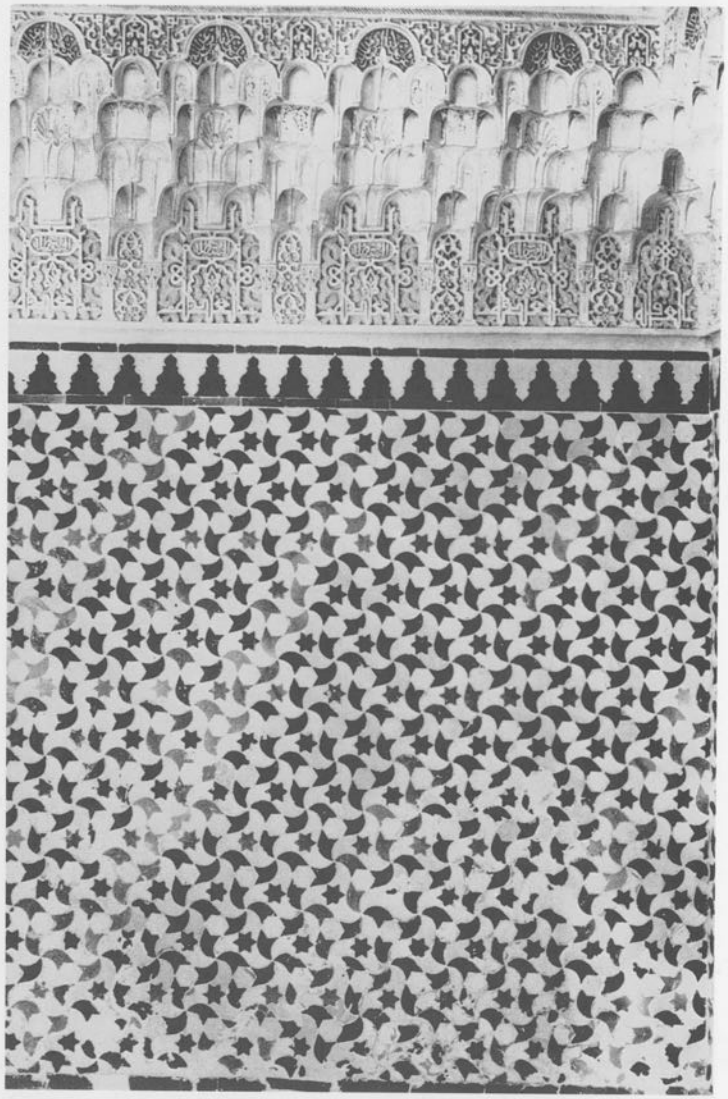
The complete field design, if it ever existed in a carpet, would have looked like this.[87]



Sketch of imaginary overall field of whirling motifs

It seems obvious that this design must be related to the design we also know as the bird carpet design.[88] It is also related to later motifs

86 *Divrigi Ulu Camii ve Darussifasi*, Ankara, 1978, Pl. 42, p. 199. Also in Balpinar, *Vakiflar Carpets*.
87 At the time I made this conjecture, I was unaware that such a carpet actually existed. Since then, two such carpets with a complete whirling field design have been published in Batari, "White Ground Anatolian Carpets," pp. 198 and 199.
88 See the GREEN CARPET WITH LEAVES and WHITE FIELD BIRD CARPET in this collection, pages 163 and 296.



Whirling motif on Alhambra tilework, 14th century

like the Ottoman tile illustrated below. And, it is related to a section of beautiful tilework in the Alhambra, dating from the mid-14th century, which shows whirling sickle motifs of an almost identical design, but carried out on a triangular instead of a square grid.[89]

Whirling motif on a tile from Rustem Pasha Mosque

When we first look at this Spanish tilework pattern, we see irregularly placed black tiles, and have a hard time trying to understand their order. Later, we recognize that the white space is itself perfectly ordered and shaped — a series of three-legged curved stars, with small hexagons between them. The black sickles are, in the end, left-overs from the placing of these white motifs — but of course, perfectly shaped left-overs.

The very same thing happens in our whirling leaf pattern. At first we see the darker forms, the whirling leaves themselves. When we look more closely, and try to understand the pattern better, we see the perfectly formed larger patterns in the orange space — and it is the regularity and spacing of these shapes which gives the design its order.

Why exactly have I illustrated the Alhambra tilework with a full-page illustration — not just with a small detail of a panel showing the whirling tiles. It is because I want to emphasize that one part of Sufism, has, among its classic forms and classic images, the form of "whirling" — and that this form, found both in the Alhambra tilework of the 14th century and found in the 15th century border of this carpet, is the *essential* thing about the carpet. It is the whirling which matters, because this whirling connects with something essential and essentially human. The whirling Sufi dance, is just another of the ways in which the Sufis fixed this whirling, and made it actual, as part of their universe.[90]

Let us now try to determine whether this whirling leaf design precedes, or follows, the bird carpet design. At first, I thought that this design was probably a transformation *of* the bird design — especially since we only know this design from a border, and know the other so well in field designs. However, when one examines the design more carefully, it seems most likely that this whirling leaf design must have been the predecessor of the bird design.

The key to the matter lies very simply, in the fact that the whirling leaf design has a deeper, and more complex symmetry arrangement than the bird design.

In the whirling leaf design, we see the following systems of centers. First, we see the main centers produced by the whirling leaves themselves. This is a large whorl, with a blossom at its midpoint.

Second, between these whorls, we see a second system of windmills — very tiny ones, which rotate the other way, and which are etched small and dark into the design.

Third, we see a system of large-petalled spaces, centered on the small windmills, on an angle to the other centers, also formed by the whirling leaves.

And fourth, we see the centers which are the whirling leaves *themselves*. These centers, though made of asymmetrical figures, are nevertheless key centers in the design — each one with a thicker body, and two curved, rotating arms flying off.

In the bird carpet we see the same system of centers. However, two of the centers have less structure, and are far less clearly formed. In

89 See Grabar, *Alhambra*, fig. 115.

90 See the carpet on page 249, with a similar border, where I have shown a photograph of a Sufi in the whirling *zikr* dance.

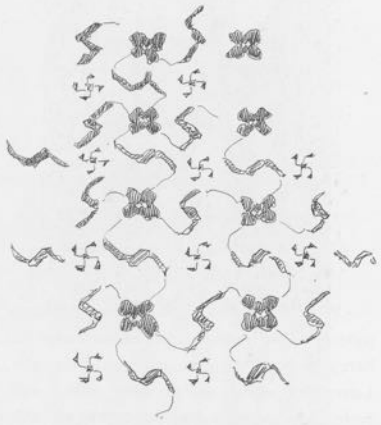
the bird carpet, the small windmills have been replaced by static flowers. Although this flower is itself, a beautiful, and multicentered design, it does not have the same connection with the other centers, and therefore fails to form the in-

Bird carpet design

between centers that tie the windmills to the larger whirling leaves.

And secondly, the large four-lobed center which whirls outside the small windmills, is much weaker in the bird carpets. Only occasionally, in certain bird carpets, is there a faint vestige of it left. To clinch the argument, we may note that in certain of the oldest bird carpets — for instance, in the fragmented carpet of the Keir collection[91] — the small windmills still occur, randomly scattered, in between the rest of the design. This is a typical later stage, when an element appears, randomly placed, but with its essential geometric contribution to a larger design completely forgotten. It makes it almost certain that the bird carpets were originally copied *from* the windmill carpets, and not vice versa.

In the field of the carpet we have something which looks, at first sight, like a version of the typical "Ushak" two-ended prayer format, com-

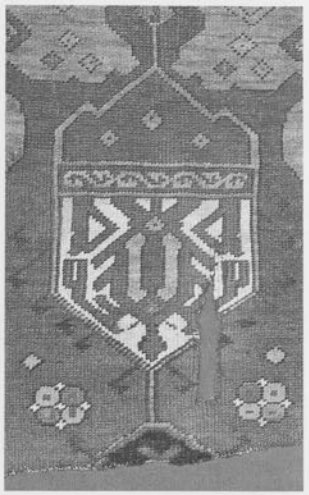


Whirling design

mon in the 15th and 16th century medallion carpets.

But, once again, there is reason to believe that what we have here is a much older version. Most noticeable, is the shield hanging in the middle from the upper niche. I am fairly certain that what we see in this shield, is a transformed and distorted form of a two-headed eagle: the Artukid coat of arms. We know that the two-headed eagle played an important role in the early history of Seljuk and Artukid art. We know that the Artuklu tiles, with the double-headed eagle in the Artukid coat of arms, dates from the 13th century.[92] We also know that two-headed eagles, later appear on a variety of carpets

91 Spuhler, *Keir Collection*, Pl. 25, pp. 62-3.
92 Aslanapa, *Turkish Arts*, p. 109; Aslanapa, *Art and Architecture*, pp. 166-7.



Shield with double-headed eagle in the carpet

The double-headed eagle at the Divrigi Mosque

Another Seljuk carving of a double-headed eagle

seen in paintings of the 13th and 14th centuries.[93] And we also know, finally, that the use of heraldic devices appeared frequently in the Byzantine art of the early Middle Ages — 11th century to 13th century. If this carpet motif is what I think it is, we are here seeing a direct line from the kingdoms of Artuklu and Kudabad.

93 For instance, see the 14th century Florentine painting, Erdmann, *History*, p. 21, fig. 16.

LARGE OCTAGON CARPET

KONYA
186 cm x 265 cm

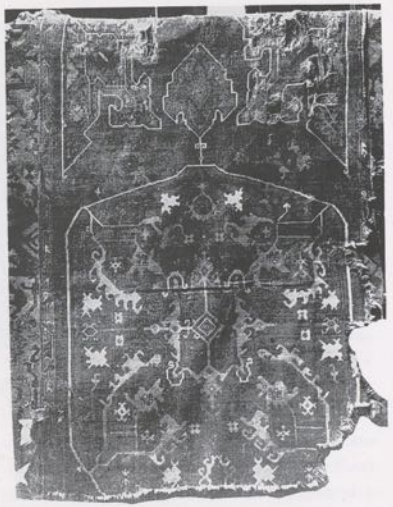
This is one of the most majestic and oldest-feeling Turkish carpets that I have handled. The pile is fleshy, and dense, with brilliant, marvellously subdued colors. The carpet conveys, almost more clearly than any other carpet in the collection, the clear sensation of an infinite and perfectly calm universe. Even people who know nothing about carpets are left in awe by the presence of this carpet. It is possible to look at it, unwaveringly, for as much as an hour. A similar, but more degenerate example of this type, from the Beyshehir mosque, is published in Riefstahl.[94] Riefstahl describes that carpet as a 17th century Ladik.

The remnants of animal figures are still to be seen in the octagon — possibly a carryover from the medieval animal carpet tradition. The animal motif which occurs within the octagon, is identical with the animal motif that appears on the lower end of the 15th century cock carpet in the Konya Museum.

In order to discuss the carpet properly, I shall first discuss the octagon format of the large pattern Holbeins, which this carpet resembles. Most important of all, in the large pattern Holbein carpets, is the majestic octagon. What I

Border animals in the Konya carpet with cocks

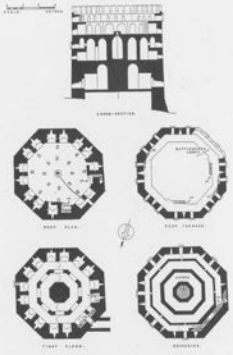
Animal motifs scattered in this carpet



17th century carpet in the Turk ve Islam Museum

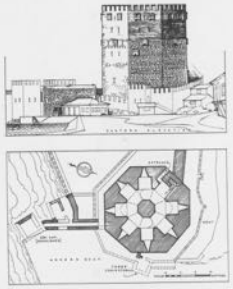
94 Riefstahl "Primitive Rugs," Pl. 11.

Plan of the Octagonal tower at Alanya, 13th century



Other levels of the Alanya tower

I loosely call "majestic" is a structural feature which can be described in terms of the pattern of local symmetries.



Compare these window forms with the LPH octagon details

The format of a "great" octagon lies in the depth of the boundary, in the relative scale of the small indentations, in the ratio of the center to the boundary wall, and in the shape of the indentations. When we repeat these features correctly, we always get an octagon that has the same structural feeling as a "great" octagon.

The order of the great large pattern Holbein octagons comes directly from the earliest Seljuk monuments, is very ancient, and has a specific date. Thus, for instance, let us consider the ground plan of the octagonal tower, at Alanya, south of Konya, completed in 1226.[95] Here we see the same order, in the power of the octagon,

Classic large pattern Holbein carpet with giant octagon

95 Alanya plan taken from Seton Lloyd and D. Storm Rice, *Alanya*, London, 1958, pp. 11–15 and figs. 2, 3.

The bird-like corner motif

Bird corner on an early white ground carpet

the proportions of its outer shell, and the importance of the indentations in the corners of the octagon that we see in the very earliest large pattern Holbeins.[96] The drawing is almost identical.

Although it may seem fanciful to connect the ground plan of a fortress, which is after all never directly visible, with the drawing of an octagon on a carpet, it is nevertheless my conviction that the fundamental order is the same, and that the similarity cannot be ascribed to coincidence. It is precisely this type of underlying morphological order which remains visibly constant in the art of any one period, and which varies from period to period. Given the extreme rarity of the large pattern Holbeins, it is likely, in my opinion, that the octagon in the carpet design and the stone tower, came from roughly the same era.

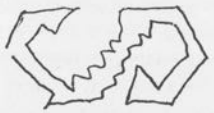
Another important feature of the carpet is the subtle ambiguity of the minor border. This figure, which in later carpets, takes a simple reverse S-form, is so beautifully constructed that it has a very large number of interpretations.

S-forms in the minor border

In different parts of the border, these different interpretations of the figure-ground, dominate, alternately, like the figures of a Bach fugue.

The corner motif of the carpet is one of the

The subtle interlock in the drawing of the minor border



Ambiguous S which appears and disappears

96 For instance, Yetkin, *Turk Hali*, Pl. 37, in the Turk ve Islam, or Dimand and Mailey, *Metropolitan Museum*, fig. 155, Philadelphia Museum of Art.

primary forms of corner motif — and could be considered, in type and drawing, the precursor of a long line of later forms. Its strength is visible, in the extraordinary way that the corner grips and encloses space. This corner motif may have its origin in the animals — birds — which were perhaps placed in the corners of some much earlier carpets. An example of these birds, in a corner position, still exists on a white ground carpet in Chicago.[97, 98]

The coloristic depth of the red field is also marvellous. The dye itself is beautiful. But what makes the red shine with its particular depth is the subtle interplay of brown and blue, tinged with very sparsely located highlights. That is, ultimately, the glory of the carpet.

STAR CARPET WITH FLOWERS

KARAPINAR
144 cm x 238 cm

This is perhaps my personal favorite of the carpets in the collection. It has a freedom, and blitheness, which is quite incomparable: and shows a high point of Sufi art, a state of liberation, in which the artist is so free, that he is able to be completely natural.

There is no imposed schema in this carpet, no representation, only the wild play of forms, creating almost perfect unity of space, with perfect abandon. If compared with any other carpet, from the point of view of the question: Which is a better mirror of my own self, this carpet will often be chosen — not because of the intricacy of structure of a great classical carpet, not because of the delicacy of color or ornament of a great Safavid carpet — but because, somehow, in some quite mysterious way, this carpet portrays, almost, the abstract structure of our dreams, the meandering of the soul — it reaches deep down into the structure of the human self, beyond any conscious classical structure, so deep, that structure almost vanishes.

These words might seem fanciful to someone who has not looked at carpets with this point of view. However, I hope that the concepts explained in part 1, are being made clear enough by examples so that when the reader comes back to look at this carpet again, after looking at many of the others, and then comes back to it again, and then again, it may slowly become clear that this judgement is not merely an opinion but — at least in rudimentary terms — a matter of fact.

As far as date is concerned, the carpet would typically be considered a 17th century carpet. My impression is that the carpet is older. The drawing, the peculiar offbeat morphology, based on flowers, but also somehow formless, is similar to the feeling and drawing of the tilework in the Green Mosque of Bursa, finished in 1424.

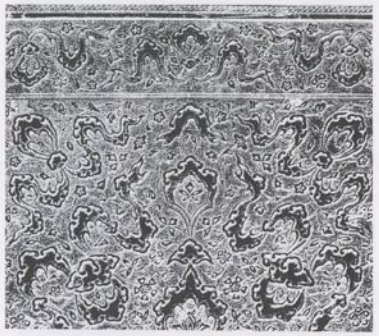
Two other comparable carpets are known.[99]

97 Illustrated Bode and Kuhnel, *Antique Rugs*, fig. 32, and shown on page 211.
98 Celal Esad Arseven, *Les Arts Decoratifs Turcs*, Istanbul, 1952, figs. 134, 135.
99 Both published by May Beattie, "Some Rugs of the Konya Region," *Oriental Art*, Vol. 22, No. 1, 1976, figs. 10 and 11. One is in the Textile Museum, the other formerly in the Murray-Graham collection. The first of these two was also published in F.R. Martin, *History*, fig. 333.

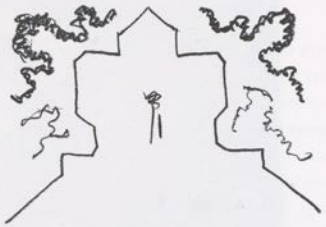
SMALL MEDALLION CARPET WITH SQUARED MIHRABS

USHAK
110 cm x 147 cm

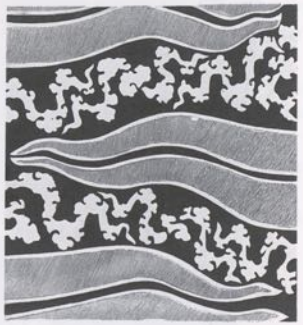
Small central medallion carpets are known from Timurid paintings and from early Turkish paintings. This design is very close to the design of a 15th century Timurid book cover in the Metropolitan Museum.[100] The book cover, which dates from 1459, seems at first, to be an endless array of cloud bands, similar to those which appear in the spandrel of this carpet. When we look closer, we see that the position of the cloud bands in the carpet, is *exactly* the same as the position of the cloud bands in the book cover. When we look closer still we see that the inner cloud bands in the book cover are placed in such a way as to form a niche, just where the niche appears in the carpet—and that, still further towards the center, the cloud bands are placed in such a way as to form a medallion, just where the medallion occurs in the carpet.



Arrangement of cloudbands on a 15th century book cover



The cloud band formation



Silk brocade in the Topkapi Museum

100 See Dimand and Mailey, *Metropolitan Museum*, fig. 52, reproduced in part 2 of the present book on page 106.

The carpet belongs to a well-known type, which exists somewhat less often in this early form with the squared mihrab. There is a very similar piece in the museum in Vienna,[101] and another in the Metropolitan Museum in New York.[102] A related cloud band motif, appears in a 16th century textile, made with silk and silver thread, now in the Topkapi Museum.[103]

101 Illustrated in Angela Volker, "Uberlegungen zur Neuaufstellung der Orientteppichsammlung des Osterreichischen Museums fur Angewandee Kunst in Wien," *Hali*, Vol. 2, No. 1, 1979, p. 14.
102 Illustrated Bode and Kuhnel, *Antique Rugs*, fig. 26.
103 See Tahsin Oz *Turkish Textiles and Velvets*, Ankara, 1950, Pl. 36.

BLUE TIMURID LOTTO WITH RED ANIMALS AND SWANS

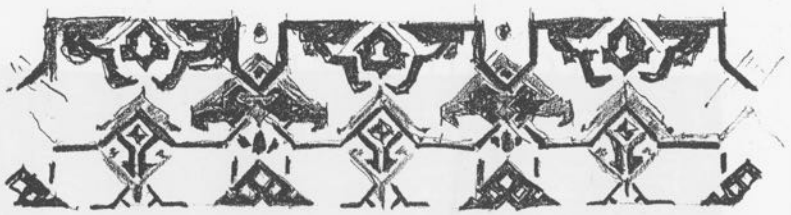
USHAK DISTRICT
148 cm x 199 cm

This carpet can be considered important for two reasons. First, of course, it is a Lotto carpet with a blue lattice — an interesting rarity.[104] Far more important, it is the only carpet I know which shows a direct relationship with the famous lost Timurid carpets we know only from

14th century painting showing carpet with this border

104 There is an apparently later carpet in the Turk ve Islam, with a blue and green lattice — but in which the drawing is already quite degenerate. Yetkin, *Turk Hali*, Pl. 36.

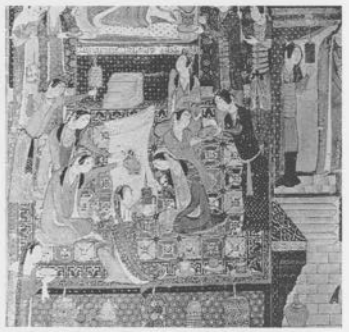
BLUE TIMURID LOTTO WITH RED ANIMALS AND SWANS



Sketch of the way the border works

various 13th, 14th and 15th century paintings. The border of the carpet is based on a square module that contains the Seljuk Rumi-lotus as the central element. This border appears in at least half a dozen different paintings, and must evidently have been a famous and widely used border in the 14th century. To my knowledge, no other remaining carpet contains even a version of this border.[105]

The complexity of the border as it shows itself in this carpet is quite remarkable. The Rumi-



Another 14th century painting showing this border

lotus figure shows up within the design in three different, and overlapping ways — all included within the square white figures that form the kufic modules.[106] A vaguely related motif appears in 13th century Konya tile mosaics.[107]

The minor border of the carpet is also one which appears frequently on 14-15th century

Another carpet in the same painting also with this border

carpets — it seems most likely, therefore, that this carpet, in spite of its relatively good condition, must date from that period.

Also striking is the fact that each module of the border shows a pair of swans, facing each other. The occurrence of swans in a carpet is highly unusual: a rare reference describes the carpet belonging to Pope Benedict XII of Avig-

105 Because of the importance and rarity of the carpet, I decided several years ago, to have it extensively reconstructed. The field and border had been reknotted in faded wool; I have had the carpet brought back to its original condition as nearly as possible.

106 Timurid border shown in three paintings: twice in 1396 miniature, Dimand and Mailey, *Metropolitan Museum*, p. 31, fig. 45; Yetkin, *Turk Hali*, p. 69, Undated pre-15th century, ill. 39, and 1460 miniature, ill. 38.

107 See Walter Denny, "A Group of Silk Islamic Banners," *Textile Museum Journal*, Vol. IV, No. 1, 1974, p. 74, fig. 13.

The basic element of the border

Sketch of the border element

non, as "powdered with green parrots and white swans."[108]

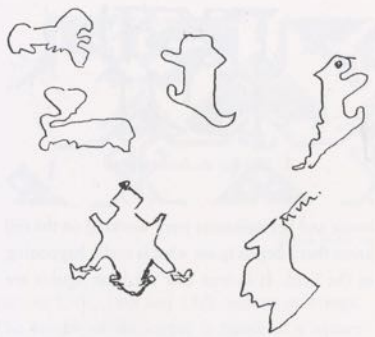
As interesting as the wonderful border, is the field. At first sight, the field looks like a normal "classical" Lotto lattice — indeed, it looks somewhat degenerate, since the blue figures occasionally appear clumsy and not quite properly drawn. When I first got the carpet, the red knots in the field had disappeared almost entirely (the original knots had been replaced by badly died new knots which had since faded). However, once I began to understand the real nature of the field design, I had all the bad knots removed, and replaced once again with the lustrous red which gives the field design its magical ambiguity. It was while Davina Waterhouse and her assistants were working on the red knots that I began to see what is really happening in the field. It is true that the blue figures are

The paired swans in the border

less coherent than the "normal" yellow Lotto figures. However, what is not so clear is that the red figures are far *more* coherent than they are

15th century Persian miniature

108 See Monique King, "French Documents Relating to Oriental Carpets, 15th–16th Century," Pinner and Denny, eds., *Studies II*, p. 132.



Examples of zoomorphic shapes in the red field of the carpet: Lobsters, lions, squirrels, stags' heads

in a normal Lotto. I began to realize that it is the red figures which are the real content of the carpet. When studying the apparently misshapen blue figures, I began wondering if they had been damaged, during re-weaving, by some earlier restorer, and then began discussing with Davina, the possibility of "correcting them" — trying to find the original drawing which had been damaged and replaced. While doing this, I began to see that re-drawing — "correcting" — the blue, would cause tremendous damage to the red. The material forming the red figures was not a left-over, but a wonderful animal-like stuff. Indeed, the red, when one looks at it carefully, is made of stags' heads, flying foxes, lions, lobsters, crabs, scorpions — and appears to be a veritable zoo of zoomorphic forms, and the blue stuff is really left over from the red. If you "straighten" the blue stuff, you disturb the red. Thus the apparently misshapen blue, was done on purpose, to allow the weaver to create the proper forms in the red. This is the exact reverse from the normal Lotto in which, it is fair to say, the main drawing is the yellow stuff — the "chainwork." The red is the left-over from the beautiful working through of the yellow. But the red, as a result, though nice, is actually meaningless. The force of a normal Lotto is not in the red as much as in the yellow.

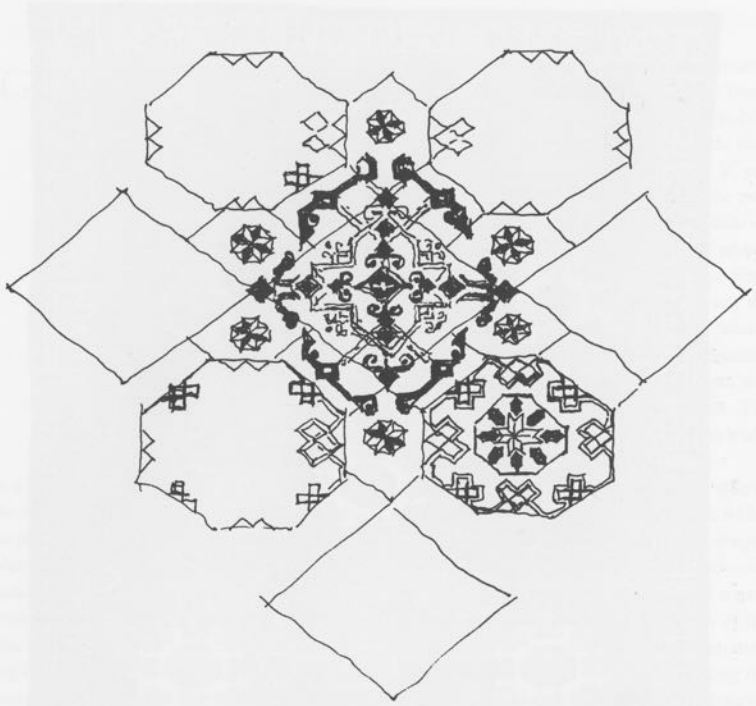
In this carpet on the other hand, the weaver was concentrating on the red. It is the red which is animal-like, and which drives the design. Thus this carpet is, in my view, older and more primitive than a normal Lotto. It is as if we are seeing here, the real zoomorphic origin of the Lotto design. The weaver is still concentrating on the world of animal stuff — and creating the blue figures, while doing it. In later designs, the blue stuff turns to yellow and becomes the primary focus — and the evolution of the normal Lotto design begins.

SMALL PATTERN HOLBEIN CARPET

WESTERN ANATOLIA
141 cm x 235 cm

The design of the small pattern Holbein carpets is one of the most intricately interlocked to have occurred in the history of carpet weaving. It is perhaps the one where the pure multiplicity of centers is most explicit, and most unadorned, and where the design has nothing else *but* centers in it. It is a design, where the density of centers is intensely visible.

Since many of the carpets still intact are rather damaged, like this one, it is rare to be able



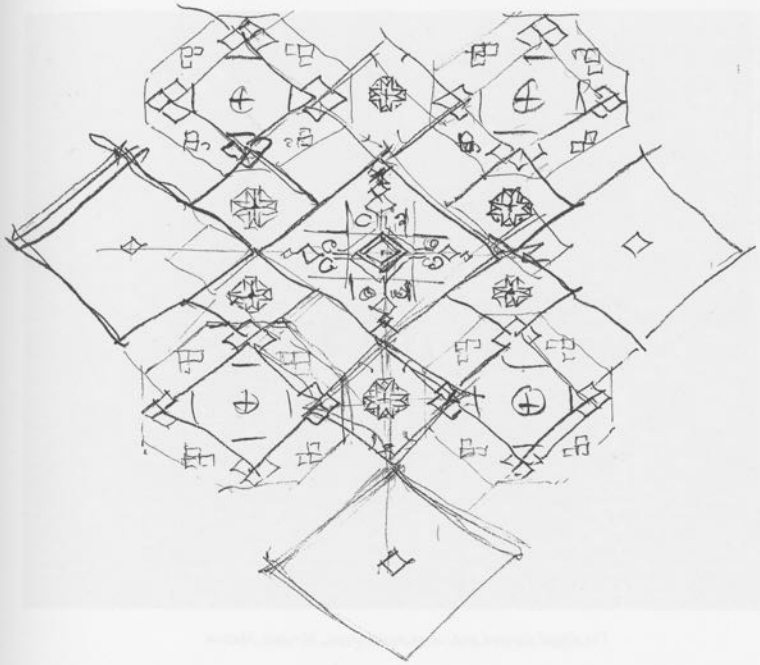
The way the slipped diamond grid generates the design

to see the full interlace of the design correctly. However, the interweaving of the tracery to produce a profuse multiplicity of centers — and yet maintain calm and order — is extraordinarily important. We may look at this tracery for hours and hours without tiring — and can, constantly and continuously, find ourselves in every part of it.

The subtle multiplicity of centers produced by interwoven tracery, as in this carpet, is closer to the Seljuk tradition than to the Ottoman tradition. Thus, although Ottoman rulers and artists introduced the floral tracery in the mid-fifteenth century — this design belongs to the older tradition of Seljuk tracery, that originates in the stone carvings of the 12th and 13th centuries.[109] This conclusion is confirmed, too, by the depth of the mirror of the self reached in the carpet, which we would expect to find in a carpet from the main Sufi period, again 12th-13th centuries, rather than in the more romantic floral work of the Ottomans.

It is generally believed that the design arose at some stage in the history of Timurid weaving — probably in the fourteenth century — and was then brought to Turkey in the 15th century and developed and established as part of the the repertoire of court weavers in Northwestern Anatolia. A book illumination with similar mor-

109 For instance Arseven, *Arts Decoratifs*, figs. 290, 291.



The slipped diamond grid, 2:3

phological feeling, but different detail, may be seen in the frontispiece of Rashid el Din, from the year 1310, now preserved in Paris.[110] Others occur in various Timurid paintings from the 14th and 15th centuries.

On the surface, the design appears simple. It is, in fact, of immense complexity.

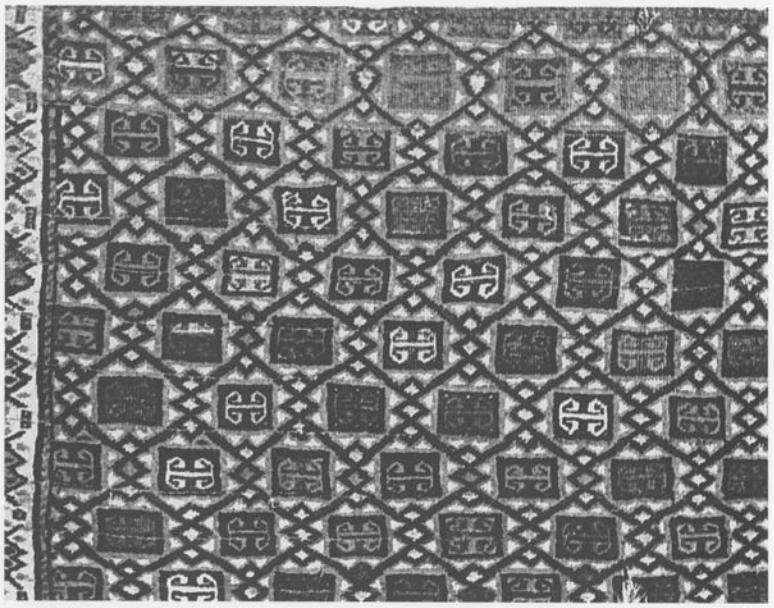
In order to understand the design completely so that one can reproduce it accurately, and create all the necessary centers in their proper relations to one another, it is also necessary to understand the underlying grid within which the centers exist. *This underlying grid is extremely surprising.*

In discussion of the small pattern Holbein design over the last few decades, it has always been described as a design based on octagons. The fact that there are various octagonal and four-pointed star forms visible in the design, has naturally made people assume that the underlying generative grid is also based on octagons and stars.

What I finally realized after many efforts to draw the design correctly myself, is that the underlying grid is a unique system of slipped diamonds, with a 2-3 ratio, and that it is the peculiar, syncopated quality of this grid which gives the design its underlying order.

What is crucial about the way this grid

110 See Riefstahl, "Primitive Rugs," fig. 26.



The slipped diamond grid, in an actual carpet, Mevlana Museum

works, is that the centers do not line up. A given center in one row, lies on a line, which does *not* pass through the next center in the next row, but instead passes through the *edge* of the center in the next row.

This syncopated structure, and the fact that the underlying diamonds are of two sizes, not of a single size, is the key to the whole thing.

If you start by drawing this grid — and then try to draw the design while paying attention to all its centers — then you will usually get the whole thing right.

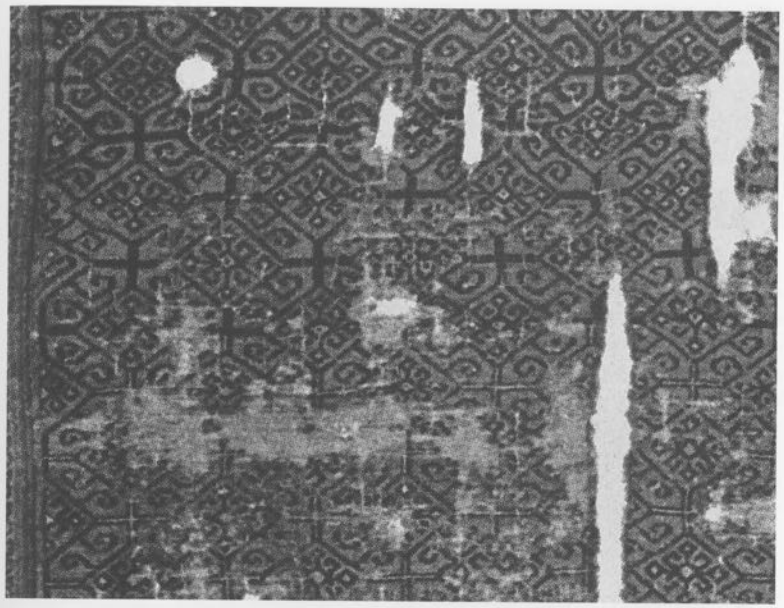
In two famous carpets in Turkey this peculiar 2:3 slipped diamond grid appears *explicitly* in the carpet design itself. These carpets are both illustrated in Yetkin.[111]

It is significant that the predecessors of the small pattern Holbein design — the various Timurid designs which are visible in so many early Timurid paintings — *do not* share this complex structure, and are indeed designs based on simple four-point stars and octagons.

I assume, therefore, that the small pattern Holbein must be regarded as a marriage of the underlying subtlety of the unusual and complex grid which first appeared in Central Anatolia, together with the richer and more elaborate complexity of the octagon and star that come from Timurid design.

This analysis reveals that the small pattern Holbein design is not primarily a court or classical inspiration (as is so often said), but instead received its deeper inspiration from the same tradition near Konya which nourished so many of the other startling and extraordinary carpets from that region.

111 Yetkin, *Turk Hali*, English edition, 1981, Pl. 47 and Pl. 78.



The slipped diamond grid in another actual carpet, Vakiflar

The sheer subtlety and complexity of the small pattern Holbein field design as a system of centers, needs one more comment. It is immensely hard to draw. I have commented elsewhere (page 178) on the difficulty of drawing one of the early borders associated with this type of carpet, because the centers are so hard to grasp. The same difficulty, even more pronounced, exists for the field design itself. For years, I have given my students and apprentices the task of drawing the field design pattern: simply trying to copy it, by eye, from an illustration. As the student tries to draw it, the difficulty becomes more clear. It is extremely hard to draw it successfully, in a way that leaves all the centers intact, that gives each center its shape and weight correctly. Most of the time, as you try to draw it, one part gets too strong, another gets crowded, and the overall balance of the pattern disappears. I myself, practiced at drawing difficult carpet designs, always had the same trouble too. And no matter what tricks or mnemonics I used, I still couldn't get the balance right.

It was finally, in an effort to simplify this task, to make it even do-able at all, that I discovered the underlying grid which I have described. Once one grasps the 2:3 slipped diamond grid and draws its skeleton, then the task becomes possible, even easy. On the other hand, using the simpler grid of octagons which one has always assumed to underlie the SPH pattern, just does not work. It is only the slipped diamond grid that actually works. That is what makes me certain that this is the key to the design.

Previously published.[111a]

111a *Lefevre*, 3rd February, 1978, lot 7.

SMALL PATTERN HOLBEIN FRAGMENT

WESTERN ANATOLIA
125 cm x 53 cm

I should like to continue discussion of the small pattern Holbein carpets with a discussion of the characteristic border, which, in carpet circles, has become known as the "kufic" border.

It is also clear that the endless knot, was a common feature of Timurid carpets, at least as they are represented in 14th and 15th century Persian miniatures.[113]

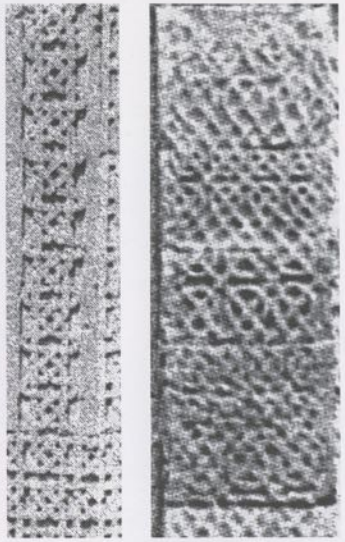
The implication of this term is that the design is a degenerate form of the much earlier "kufic" writing, a type of script, transformed by the art of calligraphy on early tilework, and then incorporated, so the theory follows, into carpet weaving in the form of these kufic borders. In my opinion, it is likely that this type of border is not derived from lettering at all, but is a late version of the widespread endless knot or endless braid design, which was common through Northern Europe, from the 6th to the 14th century. This is especially clear when we look at earlier forms of the kufic border.[112] Here the curving knotlike character of the lines is still evident.

However, if we compare the 8th century braids from the Book of Kells, or the Lindisfarne gospel, with the Timurid versions, we see that the Irish and Lindisfarne versions are actually more similar in structural feel to the structures we call kufic borders, than the real kufic inscriptions of early Persian art.

I believe this is important, for itself, since it invites searches for possible link carpets, in which the endless knot or braid appears more explicitly. It is also interesting above all, because it gives us yet one more example of the possible influence of the northern art of the dark ages, on the weaving and design of carpets. Strzygowski[114] has argued that a large part of what we now call Byzantine art, and early Christian church art, came from Northern Europe — especially from Norway and the northern British Isles — via a trade route that went down the Danube, to the Black Sea, through the 4th century Armenian churches built north of the Black Sea, and then on to Constantinople. This line of influence, if correctly judged, would predate the Seljuks by almost 800 years — and the possibility that many important carpet motifs — possibly even including the art of weaving itself, in some respects — is tantalizing.

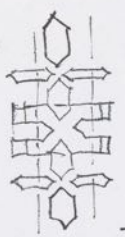
112 See for instance Pinner and Stanger, "Kufic Borders."
113 See Briggs, "Timurid Carpets."

Tenth century kufic border from Masjid-i-Jami, Nayin

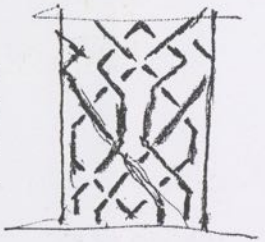


12th century Seljuk braid work from Alay Han, near Aksaray

12th century braid work from Ireland, Clonfert Cathedral



Drawing the braid in the carpet border



Typical braid-work from the dark ages

Complex braids were used in Ireland, long before their appearance in Timurid art. For example, the west doorway of Clonfert Cathedral, County Galway, built about 1164, is surrounded by a series of stones, each one embroidered with a highly complex braid in relief.[115]

114 Strzywgowski, *Church Art.*
115 From John Ranelagh, *Ireland*, New York, 1981, p. 70.

LOTTO CARPET WITH GREEN CHAINWORK BORDER

WESTERN ANATOLIAN WORKSHOP
232 cm x 274 cm (complete)

This complete large format carpet is a classical example of the Lotto design. It is virtually identical to the carpet which appears in this Spanish painting dated about 1520, suggesting that the carpet was probably woven in the mid-15th century.[116]

Annunciation, Master of Retable of Santos-o-Novo, c. 1520

116 The painting is the Annunciation by the Master of the Retable of Santos-o-Novo, reproduced in John Mills, "Lotto Carpets in Western Paintings," *Hali*, Vol. 3, No. 4, 1981, p. 279, and reprinted in Ellis, *Oriental Carpets*, with 1520 (?) date.

FLOWERED CARPET WITH GIANT CENTRAL MEDALLION

KARAPINAR
194 cm x 264 cm

Possibly the carpet which most strongly embodies the structure described in part 1 (see pages 29-30) — above all because of the green and red interlock in the spandrels and the broad glorious drawing of the overall design — it is at one and the same time, one of the boldest carpets, and one of the quietest. It is under these conditions, when something is both bold and quiet, that the being nature or soul of the carpet comes forth most clearly.

The very subtle nature of the green-red effect, and the way the green lines and the red lines interlock and create a shimmering unity, is worth studying in detail. The interlock design, and the idea of such an interlock, is extremely old — in all forms of art. In its origins it was probably less simple-minded than simple latchhooks — a more complex "two-sided" form in which positive and negative interlock continuously. The illustration here shows an example from the neolithic period in which people and goats are interlocked in the design.

The blossom at the very center of the carpet is extremely interesting. It is quite simple. But the care with which the elements are shaped as centers gives it tremendous force.

The animal figures in the middle of the medallion — perhaps horses — are reminiscent of the animals in the Crivelli carpet.

Central blossom

Horse-like animal figure in the medallion

Prehistoric interlock of goats and people, Catal Huyuk

Similar animal on Crivelli carpet in Budapest

ENDLESS REPEATING DESIGN WITH BLUE LEAVES ON A YELLOW BORDER

WESTERN ANATOLIA
107 cm x 203 cm

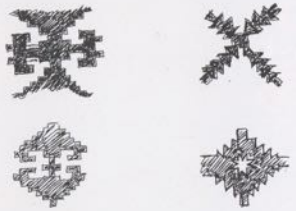
Here we have dazzling color and brilliant egoless form. This deceptively simple carpet, its very fine weave, subtle coloration of brown yellow and blue which is almost Seljuk in quality, the finesse of the design — all suggest a 15th century date.

Same border on Crivelli carpet in Budapest

The design is particularly interesting since an endless repeat — in any form — is the most fundamental structure of centers that there is, and the most fundamental way of making wholeness in the plane. The endless repeat creates life, because of the interlocking of centers, and the perfect existence of two additional systems of centers in between the system of main centers which forms the main repeat.

The next fascinating thing to look at is the way in which border and field are essentially the same design. Thus the continuous repeat which covers the field, also repeats in the border — almost identically in the deep structure — yet the surface detail makes it look like an entirely different design.

In chapter 1, I have mentioned the idea that



Field space, field element, border space, border element

every carpet is a picture of the endless universe. We are looking out through a window to the everlasting stuff, which we see dazzling and repeating through the window. The window cuts the design, because the design goes on forever,

so we get an arbitrary cut made by the window frame. And of course, the window frame itself, also being part of the universe, is made of the same stuff as what we see through the window.

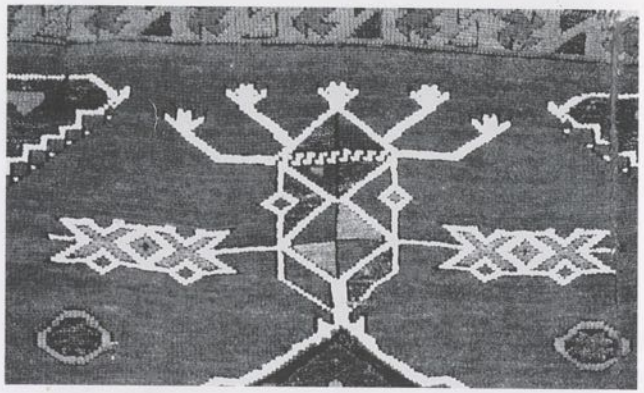
This carpet, fragmentary as it is, is one of the simplest and loveliest examples of this endless repeating universe, seen through the window in whose frame the same universe repeats.

CARPET WITH HEAD MASKS AND GULS

KARAPINAR DISTRICT
100 cm x 256 cm

This is one of the most compelling of the carpets in the collection. It is one where a simple construction of centers, most vividly produces life within the carpet.

The head mask with antlers that appears at each end of the field, is both startling and mysterious. This mask appears almost African — it is the kind of motif one would expect to find in the Nigerian carvings of the Yoruba. Though specifically prohibited by Islam, this shamanistic, ritualistic head mask, establishes a strong connection with prehistoric carvings.



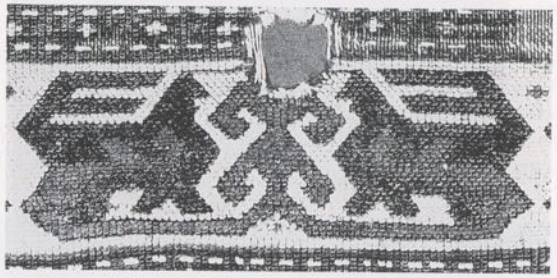
The complete head mask from the top end of the carpet

It is very interesting to see how the overall animistic feeling in the carpet is created by a kind of "extension" of this head mask motif, into the overall motif and character of the field design. The two horizontal ornaments that stick out from the head, are repeated once more in the field, without a head — between the first and second gul. This motif, made of simple cross ornaments, also includes the small white outlined diamonds, which serve as eyes within the head mask. Thus the ornament in the middle, without being too explicit, creates an overall sense throughout the field, of an animistic presence — the eyes follow you, the head ornament is pervasive — as if, in a very subtle fashion, the spirit of this head is present throughout the field.

What remains of this carpet has been pieced together from three separated pieces, found at separate times, through separate sources. I have been told that there is, still existing, a fourth piece of the carpet but I was never able to find it.

THE PREGNANT BIRD FRAGMENT

KONYA
108 cm x 115 cm



Paired birds from the pregnant bird fragment

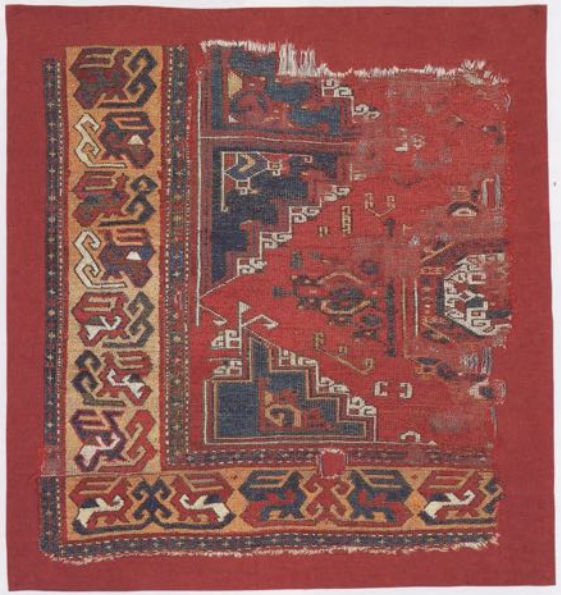
An example of the true animal carpets of the 15th century. The birds are drawn realistically, in a way similar to the cocks in the carpet in the Konya Museum,[117] and to those in the painting by Jaume Huguet.[118] However, in this carpet each bird contains within it, a smaller bird. The birds may be drawn as pregnant.

The horizontal border shows the birds paired with a tree of life, just as they appear in the Marby carpet. The birds in the vertical border alternate in direction, and are drawn together with the half tree of life, which appears like two latch hooks. The overall drawing of bird, fetus bird, and tree is a beautiful arrangement of interlocking lines, all positive. Although, as I have shown, many early carpets contain animals and animal forms, only a few of these "true" animal carpets remain in existence.

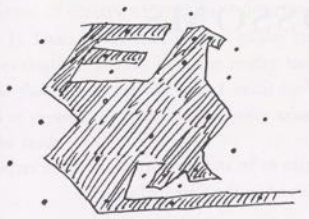
It is helpful to see the animal as a construction of geometric forms. I have said repeatedly throughout this book, that the real power of a carpet comes about when the centers cooperate to form densely packed wholes. This is no less

Birds and tree from the Marby carpet, 15th century

117 Illustrated page 238, and in Yetkin, *Turk Hali*, plate 20.
118 Illustrated in Yetkin, *Turk Hali*, p. 34, ill. 7.



true with animal forms. Although the realistic animal forms of Kashan 16th century carpets are "artistic" in a boudoir, or realistic sense, they do not have any real artistic power. The real power comes about, as in the border animals of THE PREGNANT BIRD FRAGMENT, when the centers in the form cooperate and create power geometrically, by making centers that are densely and powerfully glued together. At that stage, the animal essence comes into the thing because it has life inherent in the structure and we then respond to this life in the structure—not because it "resembles" an animal in some photographic sense.



The many centers in one of the birds of this carpet

In this carpet the bird is composed so that it has, and induces, many centers in itself.

I want to emphasize that this is not merely an intellectual argument, and also to make sure it is clear what I am trying to say. If we look at the dog or the bird of the Kashan carpet, they look realistic; and of course, you assume they too must be made of centers. But they are not made of *powerful* centers. A real animal is made of powerful centers, but a pseudo-realistic draw-

ing like the Kashan bird, is *not*. On the other hand, the birds, or cocks, or tailed peacock animals of this carpet, are made of *very* powerful centers. In one sense, we may say they don't even look like animals. That is also true of the birds in the Marby carpet, or the birds (are they really birds?) in the Konya carpet which I have illustrated. But all of them are made of powerful centers, in the legs, in the tail, in the space

Realistic bird without powerful centers, 16th century Kashan

between the tail feathers, in the nose, in the head, in the space outside the head, in the space of the back thigh. It is in the diagram, shown on page 237, where I have shown all the centers which exist in the animal, and where each of these centers is a strong thing, made of symmetries, shaped to work like a center, that the real power of the animal drawing resides. That is my main point about this carpet.

Cocks drawn with very powerful centers, 15th century, Konya

GREEN CARPET WITH WHITE BLOSSOMS

HERAT
70 cm x 249 cm

This carpet has been fully discussed in Eskenazi[119] and in Gantzhorn.[120] What is thought to be another part of the same carpet is preserved in the Cairo Museum.

119 John Eskenazi, *Il Tappeto Orientale dal XV al XVIII Secolo*, London, 1981, Pl. 28.
120 Gantzhorn, *Christlich Orientalishe Teppiche*, p. 177, fig. 510.

The color of this carpet dazzles, as few other carpets do. The green color, and the wonderful way the geometric forms of the lilies, and the yellows and blues interact to form the light of the carpet, is very nearly perfection. The beauty of the carpet's color is a product of the great beauty of its drawing. The blossoms have rarely been drawn with more grace, or more boldness. The beauty of space between the blossoms, the simplicity of the forms, and of the forms between the forms, has rarely been equalled. The wonderful light and clarity created by great color, is always created by geometry. It cannot be done without it. The shining green of this carpet, is a direct product of the beautiful geometry of forms through the field and in the border.

No Persian carpet that I myself have seen and handled could confidently be given an earlier date than this one. The MEDALLION CARPET WITH ENDLESS RUMI DESIGN[121] is at least a century later in my opinion, yet is readily accepted as late 15th century again and again throughout the carpet literature. This carpet seems far earlier.

The only reason I have not placed it earlier in the book — and thus consistent with the statement that it is earlier than the Rumi Tabriz carpet — is, frankly, that I did not have the nerve to do it, since this fragment has been dated 17th century by more than one writer. Yet I am convinced in my mind that this dating must be wrong. The clarity of color, brilliant shining design, and "spiritual" quality, all mark it as being of a much earlier period.

Though so small and beaten up, it is one of the pieces which most deeply embodies the structure of centers which I have described in part 1. That, in the end, is what guides me in my evaluation. It may help the reader too, to know that this carpet has what I mean by "the field of centers" as deeply as any other example in the book.

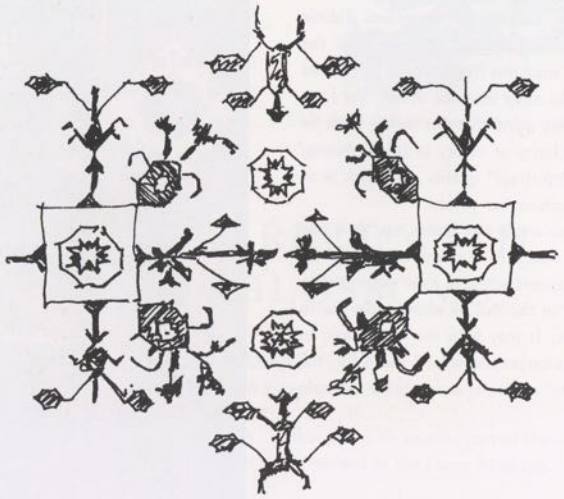
121 Page 183.

COUPLED COLUMN PRAYER RUG WITH EIGHT COLUMNS

KONYA DISTRICT
123 cm x 184 cm

This 16th century prayer carpet is related to the large group of coupled column prayer rugs. However, it is more primitive than the typical carpets of this type, has an entirely different weave, and an entirely different design feeling, closer to the abstract Seljuk tradition than to the floral Ottoman tradition which inspired most of the group. Its peculiarities lie in the very large spandrel which dominates the area above the prayer niche; the number of columns; the drawing in the panel above the mihrab; and the drawing of tendrils within the spandrel.

All in all, the carpet has impact mainly because of its scale and boldness — a feeling of strength and detailed massiveness which appears throughout — but especially, and most strongly, in the spandrels. These spandrels suggest that we are seeing here a transformation of some other carpet-type in which the octagon and tendril pattern that is partially cut here, dominated the field. I have sketched my impression of the design type which this must have come from. This would be a type of carpet contemporary with other 13th and 14th century designs like



Reconstruction of the endless design the carpet is based on

the BYZANTINE-TIMURID PROTOTYPE and the GHIRLANDAIO CARPET.[122] When we look at this reconstruction, and get its feel, we can see a kinship with the famous Berlin prayer carpet[123] which is also dominated, in its feeling, by the 45 degree tendrils with blossom fragments and

122 Pages 133 and 181.
123 See Bode and Kuhnel, *Antique Rugs*, Pl. 2 and this book p. 28.

ornaments that extend in various directions. If the ancestor I have sketched existed, it was probably also an ancestor of the Berlin carpet, thus making this a kind of "cousin" to that carpet.

The panel contains spear shapes which occur in the only known 15th century Mamluk prayer rug,[124] and in just one other published carpet.[125] To my knowledge this carpet is also rare among coupled column prayer rugs in having eight columns (four coupled columns 2-2-2-2). Six is the usual number (1-2-2-1). Previously published.[126]

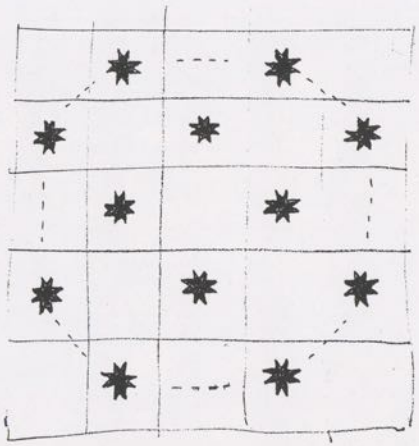
CHESSBOARD CARPET WITH GIANT OCTAGON

EASTERN ANATOLIA OR SYRIA
201 cm x 279 cm

One of two or three of the larger known chessboard carpets, this carpet has the same date and character as the very large example in East Berlin. There has been almost endless speculation about the origins of these carpets, with Rhodes, Damascus, Cairo, North Africa, and various other places given as possibilities.[127] Recent discussion has also focussed attention on the notion that the subgroup to which this carpet belongs might possibly be of

13th century carpet in the Vakiflar Museum

124 Richard Ettinghausen et al., *Prayer Rugs*, Washington D.C., 1974, p. 130, fig. 19.
125 Eberhardt Herrmann, *Von Lotto bis Tekke*, Munich 1978, Pl. 2, and *Hali*, Vol. 1, No. 3, 1978 advertisement p. 29.
126 Bud Holland et al., *Rugs from Chicago Collections*, Chicago, 1970.
127 Spuhler, *Keir Collection*, p. 73, and Spuhler survey article.



The octagon scheme formed by the layout of white stars

Anatolian origin. In any case the design of this carpet, like so many other ancient carpets, has its origin in Timurid and Seljuk designs. In particular we may trace it to one of the earliest and most important of the Divrigi carpets in the Vakiflar Museum, shown on the previous page.

A very interesting thing about this carpet, and the thing which most clearly distinguishes it from other chessboard carpets, is the way in which its overall design forms a double centralized octagon blossom by means of two octagons, one inside the other. This centralized arrangement appears to be a precursor of the Mamluk design, seen especially in the great square giant octagon Mamluks. In later and more "degenerate" carpets, the compartments still have the local order produced by the intricate details — and the ambiguity created by these details — but they no longer have the capacity to produce the large scale order of the giant octagon at the same time.

A Florentine document dated 1418 specifically mentions a carpet with chessboard and stars.[128] Other documents of the 15th century also mention chessboard designs repeatedly.[129] For some reason, scholars have had a tendency to imply that the carpets described in these inventories could not possibly be the same carpets we now call chessboard carpets. I can see no good reason for this prejudice, and prefer the simpler hypothesis: that indeed they are the same. This would imply that some version of this carpet, if not this actual type, was already in existence by the early 15th century. Previously published many times.[130]

Detailed organisation of the star

128 Julian Raby, "Court and Export: Part 1. Market Demands in Ottoman Carpets 1450-1550," Pinner and Denny, eds., *Studies II*, p. 34.
129 Pinner and Denny, op. cit., throughout.

SCARLET AND YELLOW LOTTO CARPET

WESTERN ANATOLIA
133 cm x 97 cm

Half of a small Lotto carpet. It has, among other things, exceptionally lovely drawing of the lattice, and a very rare border, which occurs in only one other carpet known to me. The syncopated structure of the border — the flowers occurring in small fields which are broken by color in a way that does not coincide with the boundaries of the forms — creates an overlapping ambiguity between successive elements that greatly increases its continuity and life. Previously published.[131]

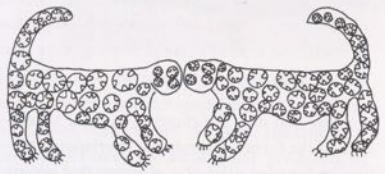
130 In *Lefevre*, October 6, 1978, No. 39; Eskenazi, *Il Tappeto*, Pl. 3, p. 68; Spuhler, *Hali*, Gantzhorn, *Christlich Orientalishe*, p. 209; etc.
131 *Lefevre*, 3rd February, 1978, lot 1.

CARPET WITH ENDLESS REPEAT OF LEOPARD SPOTS AND CARTOUCHES

KARAPINAR
134 cm x 452 cm (complete)

This carpet has the same large flowers and flower heads as the STAR CARPET WITH FLOWERS.[132] Its unity comes from the interlock of two repeating positive shapes — the cartouche shape which appears both vertically and horizontally, and the whirling four-pointed stars which appear between the cartouches.[133]

All the shapes are based on a forty-five degree line structure — so that blossoms, cartouches, animals, and leopard spots are all related by this angle similarity. The light comes from the play of the apricot color against the blue/green and purple of the cartouches. The repeated group of three white spots with red centers — once called the Chintamani design — is actually an emblematic set of three dots which has stood for the spots of a leopard from early times in Central Anatolia.



Neolithic leopard fresco from Catal Huyuk, 6500 BC

The complete carpet

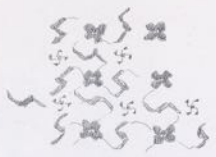
132 Page 213.
133 The whirling shape is related to the whirling border motif in two other carpets in this collection, see pages 203 and 249.

WHITE WHIRLING BORDERED CARPET WITH RED FIELD

WESTERN ANATOLIA
160 cm x 195 cm

The spin of a whirling Sufi dancing the zikr

This carpet has the same border with whirling motif, as the earlier CARPET WITH WHIRLING LEAF BORDER of this collection.[134] It is illuminating to see this border in relation to the *zikr*—the whirling dance of the Sufis. The photograph shows the posture of a dancing Sufi, right hand pointing up to God, left hand pointing down to earth. The complex asymmetry of the whirling dancer, created by these hands, is repeated, in two dimensions, by the whirling form of the motif. The field is composed of ordinary looking, but highly unusual small motifs that have a distinct and archaic character. These motifs, original in form, are somewhat more primitive in conception and more fundamental as centers, than the typical small motifs that are often strewn in the field of a carpet.



The whirling motif of the earlier version of the border

134 See page 203.

DRAGON CARPET

EASTERN ANATOLIA
200 cm x 387 cm (complete)

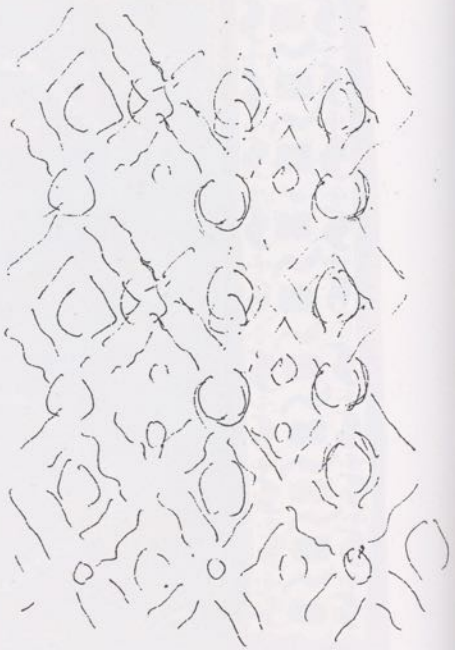
For me, the dragon carpets are among the most mysterious of all carpets. Even now as I am writing, looking at this carpet, it fills me with mystery. I feel that I know almost nothing about it. I do not know what it is, or where its patterns came from, nor what its meaning is. And I feel too, that we, the collective carpet-knowers of the world, also know too little about these carpets. Where does their great aesthetic force come from? What tradition did they come from? How do they fit into the rest of Turkish carpet art?

Most Turkish carpets solve the problem of creating unity, or wholeness, in space. The early carpets especially, do this magnificently, with various geometric organizations which are intended for just this purpose. But the wild force of the dragon carpets, their flaming colors, the strange configurations of animals, the huge palmettes and blossoms — all these must have some other meaning, surely. At least, they have an inspiration which is entirely different.

Let us begin the analysis of the dragon design, as a structure of centers. The first thing to notice, is the global structure. This is, in itself, very unusual. It is made of three main elements:

1. A grid of large medallions.
2. A diagonal trellis, connecting these medallions.
3. The spaces trapped between the medallions and the trellis lines.

What is remarkable about this scheme, is the fact that the *spaces surrounded by the trellis and medallions* are similar in size, shape, and character, *to the medallions themselves*. Thus the empty space, which is surrounded, becomes the same as — and united with — the elements which surround them. The following diagram shows this point.



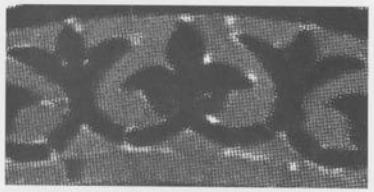
The scheme of nodes, spaces, and holes

The idea of this schema is intensified by the fact that the giant blossoms and palmettes which appear in many of the medallions, are the same as the blossoms and palmettes which appear in the spaces *between* the medallions. The result is a forceful ambiguity which creates an intense kind of unity unknown to me in other patterns.

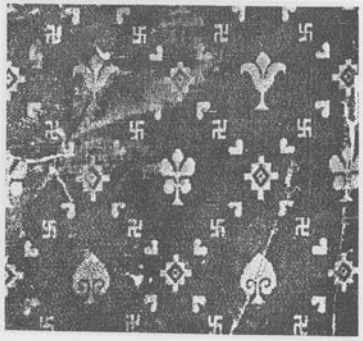
All this ambiguity and force, comes about, as a fugue, or series of variations, on a single theme: the great blossom, or great palmette-

Kufic inscription, Masjid-i-Jami, Ardistan, late 10th c.

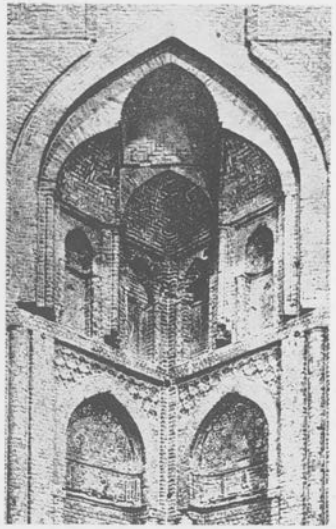
Border of Seljuk carpet, 13th century



Tile mosaic on sarcophagus, Turbe of Mevlana, Konya, 13th c.



Late classic fabric, Egypt, 4th-6th century



Small dome chamber, Masjid-i-Jami, Isphahan, 11th c.

blossom. The great palmette-blossom is among the most powerfully formed of all centers in carpet art. And indeed, *among all centers, the blossom is almost* the *archetypal center*.

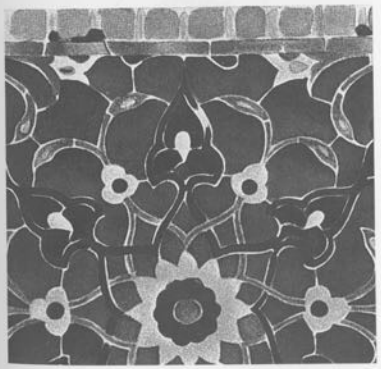
A center, in its most basic form, is an axially symmetric figure, with a direction up. If we construct the very simplest figure which has the ability to function properly as a center, it is a dot, with a line going up, and with two additional lines going out at 45 degrees. This essentially gives rise to a fleur-de-lys figure. If we elaborate it slightly, or

try to strengthen it, we get a series of wings on either side, and a series of "tongues" going upward. (See sequence of figures on next page.) Thus from the simplest powerful center which can be formed, we "get" the ancient and archetypal center, which I call the blossom.

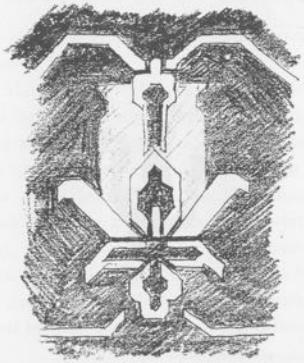
The figure is extremely ancient. It appears not greatly different, in carvings from the first millennium BC. It appears in textiles and carvings throughout the Middle East and Far East, in the 8th, 10th and 12th centuries. It appears in textiles and weavings of the Shoshoin treasure, collected before the 8th century. And it appears, of course, throughout the range of ancient carpets. One of the most powerful motifs to occur in the history of carpet weaving is the motif which has been variously described as a lotus-

Stone detail, Ince Minareli Medrese, Konya, 13th c.

"Saracenic blossom," The Berlin prayer rug, Ushak, 15th c.



Samarkand, Gur-i-Mir, Faience Mosaic, 15th c.



Blossom of an earlier blossom carpet, 15th c.

palmette, a saracenic blossom,[135] a lily, heraldic flower, etc. Occurring throughout the history of early carpets, it appears among the earliest Ushaks, among the earliest Caucasian carpets, and among the earliest Persian carpets from Tabriz. One of the most memorable examples occurs in the great Ushak prayer carpet in Berlin.[136] Others occur in the series of jufti knotted carpets from Herat.[137] It is an immensely powerful figure.

As far as the evolution of the motif is concerned, we may follow a sequence that starts in the 9th and 10th centuries, and goes forward to the 18th century. If we look at the examples on the previous double page, it is clear that the blossoms which appear in the earliest examples are highly geometric and extremely powerful.

EXAMPLE OF THE EVOLUTION OF THE GREAT BLOSSOM MOTIF AS THE MOST BASIC CENTER OF ALL POSSIBLE CENTERS

The basic center—a line and two 45 degree lines

Start of the blossom

A more elaborate center, starting to be like a blossom

The blossom formed by space between the animals

The blossom in an octagon

135 Bode and Kuhnel, *Antique Rugs*, Pl. 2.
136 *Ibid.*
137 See GREEN CARPET WITH WHITE BLOSSOMS, page 239.

Detail of a blossom

Floral and realistic decoration enters the geometry, rather tentatively in the 14th and 15th centuries, becomes purely floral in the 16th century where it is still beautiful but begins to lose its power, then becomes degenerate in the 17th century, and fully degenerate by the 18th century.

If we had to correlate the great dragon carpets and blossom carpets, with some particular moment in this sequence, I believe we would have to choose some period about the 16th century at the latest. By the time the 17th century comes in, the delicacy of floral decoration has gone much too far, and has left the dragon carpet grandeur behind.

Martin originally believed that the earliest of these carpets were made in the 13th century.[138] Later writers, including Sarre, Jacoby, and others, then "proved" that the dragon carpets began to be made in the 16th or even the 17th century. I myself believe in some degree that Martin's instinct, his intuition about the artistic force, the character, and origin and power of these carpets, was closer to the truth than the arguments presented by these later scholars. I also believe that

138 F.R.Martin, *History*, page 116.

the foundation of their argument — the idea that the dragon carpets are crude copies of Persian animal carpets (and must therefore have been made after the 16th century) is incorrect. The geometric force of carpet art is more primitive and fundamental than the extreme realism used in some Safavid carpets. Dragon carpets show an earlier form of symmetry organization which cannot, in my opinion, have been "derived" from the Persian animal carpets.

Indeed, the dragon carpet should more properly be called a blossom carpet or palmette carpet — since it is the huge blossoms and palmettes which mainly define its spatial character. These blossoms come from the same Rumi source seen in the 15th century MEDALLION CARPET WITH ENDLESS RUMI DESIGN from Tabriz. It is precisely this great shape, at the core of the Rumi carpet, which crystallizes into the form of the blossoms. The dragon carpet then appears as a kind of synthesis of the animal carpets of Western Anatolia, with the Rumi tradition of Tabriz — a synthesis which is particularly easy to imagine in just those towns of Eastern Turkey we have been discussing, since they are geographically about half way between the two on a major trade route.

In my opinion the place of origin of these carpets — so often called Caucasian — has also been incorrectly assessed. Traditionally, they are said to have been made in Kuba, a town which did not exist until the 18th century. Yet *ninety percent of all the dragon carpets ever found were found within a small circle less than 100 miles across, which includes Erzurum, Sivas, Tokat, and a few other Eastern Anatolian towns*. This fact by itself clearly suggests the most straightforward hypothesis about the place of manufacture of the dragon carpets and the blossom carpets, namely: they were made in Eastern Anatolia. I believe that an open-minded person, not influenced by preconceived theories about their Caucasian origin, will share this conclusion. There is no reason for a more complex theory.[138a]

BLUE FIELD CARPET WITH GREEN MEDALLIONS, RAM'S HORNS AND BLOSSOMS

HERAT
106 cm x 182 cm

This is a fragment of a Northwest Persian carpet, also based on the great blossom motif. What I believe is almost certainly another part of the same carpet, has been found and published by Eskenazi.[139]

138a F.R.Martin stated this point emphatically in 1908.
139 Eskenazi, *Il Tappeto*, Pl. 29, p. 90.

BLUE FIELD CARPET WITH GREEN MEDALLIONS, RAM'S HORNS AND BLOSSOMS

YELLOW FIELD BLOSSOM CARPET

TABRIZ
72 cm x 169 cm

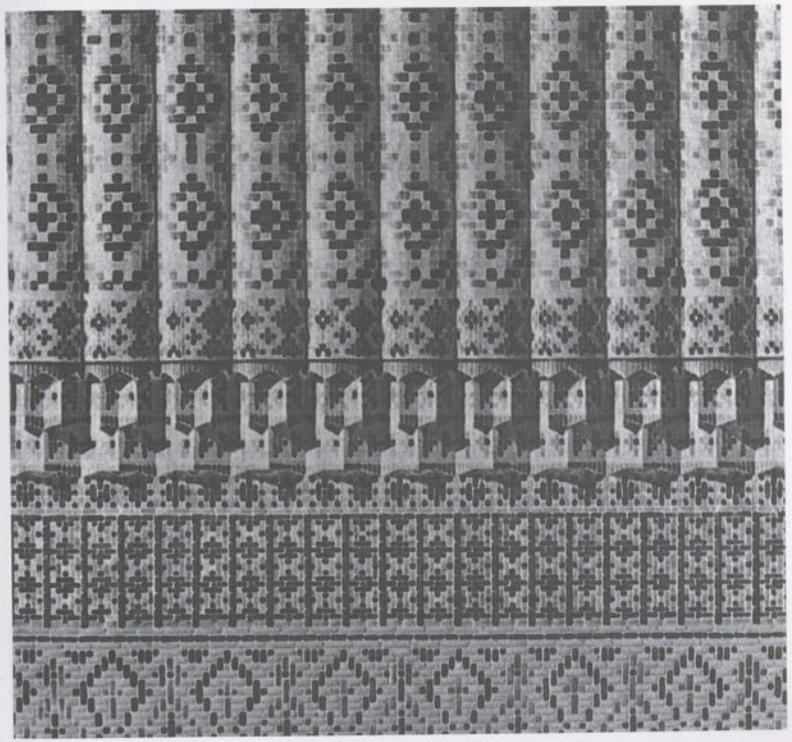
Previously published.[140]

140 Eskenazi, *Il Tappeto*, Pl. 21, p. 85. Yet another carpet based on the great blossom motif. The only other part of this carpet still known to exist, is in the Victoria & Albert Museum.

YELLOW CARPET WITH STEPPED MEDALLIONS

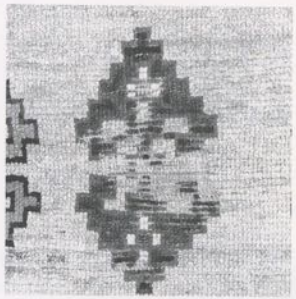
KONYA
108 cm x 287 cm

This carpet, with no known counterpart for its medallions except the 15th century ENDLESS REPEATING DESIGN WITH BLUE LEAVES ON A YELLOW BORDER of this collection,[141] is an early example of the group of yellow field Konyas, heavily wefted, soft and pliable in wool.



15th century tilework from the tomb of Timur, Samarkand

141 Page 233.



Gul of this carpet

Curvilinear form of palmette motif from Leon Bible, 960 AD

At first sight the ornaments all seem to be the same. However, when we inspect the carpet closely, we find that each row of ornaments is a variant which is repeated four times across the row. The variation is thus clearly intentional — yet in most rows it is so slight that we almost miss it.

The stepped, angular character of the ornaments is directly related, I believe, to the glazed brick and stepped tile ornaments which appear on several Seljuk buildings in Turkey, and also in earlier buildings in Eastern Turkestan. These ornaments, made up of small stepped squares, are the remnants of an entirely different design tradition, which has its origin in early Mesopotamian tile work. The stepped and angular, almost choppy, character of the ornaments, with their relation to the big square tile work of the Seljuk period, is the most beautiful thing about the carpet. It is also this stepped and angular character which permits the perfect positive space to be formed in the yellow.

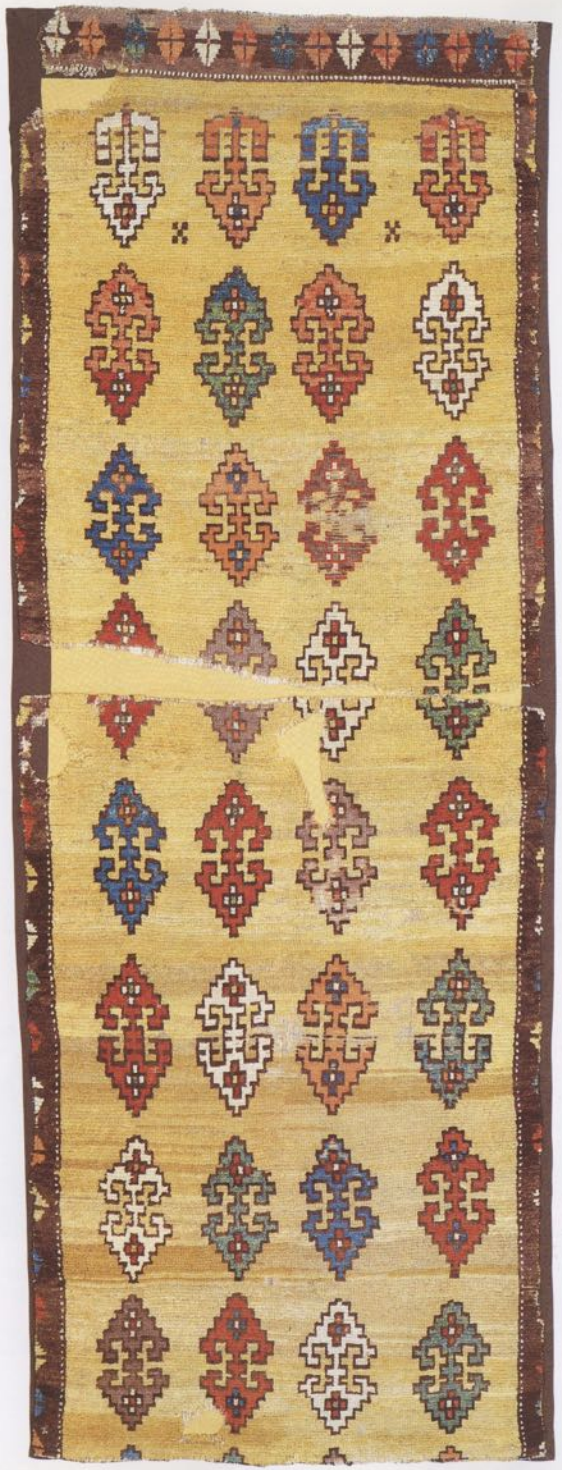
What is so impressive and unusual about this carpet is the fact that there is not one square inch of its space which is not positive. This is shown diagrammatically in part 1, chapter 8.[142] As we see in the diagram, there is literally not one square inch which does not belong to a whole or center with a definite and positive shape.

If we "step back" mentally and look at the ornaments with half-closed eyes, so that the angles disappear and only the curvilinear essence of the motif persists, we see a curvilinear spade-like motif of a very definite character which has been squared off for representation in the square tile convention. This curved motif seems familiar, and echoes the Assyrian, Sassanian, and early Seljuk palmette which appears in so many forms.

Also impressive, beyond the ornaments, is the beautiful yellow color in the field. This yellow varies intentionally, knot by knot. It is very similar in overall coloring and quality, to the field of a Chinese dragon pillar carpet which I once owned that had a color known as "imperial yellow," similarly constructed out of hundreds of different yellows. The intentional way in

13th century Seljuk tilework, Sivas, Mausoleum of Kayka'us

142 Page 55.



which the knots vary in color, not only from row to row, but literally knot by knot, and the similarity of the two pieces, makes me wonder if this Konya carpet may not have some remnant of a direct influence brought along the great silk road from China or Eastern Turkestan.

STAR CARPET WITH CENTRALIZED DESIGN

USHAK
202 cm x 375 cm (complete)

According to conventional carpet-theory the following carpet, STAR CARPET WITH ENDLESS DESIGN, would be considered better than this one, on the grounds that it has better colors, is more carefully drawn, etc. On these grounds this present centralized design carpet would be viewed as a more degenerate version, probably from the 17th century. However, after looking at the two carpets for a long time, I suspect that such a judgement is not necessarily correct.

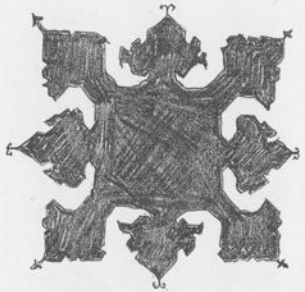
Preconception aside, the central star of this carpet, and the space which it creates, is a magnificent thing which harks back more to the ancient way. It is somewhat wilder in its drawing than the carpet in the Metropolitan or the carpet in the Victoria & Albert Museum. Although this could give the impression that it is later than the main carpets of the type and has a more village character, indicating degeneracy, examination also shows that the carpet is more forceful than the typical examples. Its wildness possibly stems from an early place in the tradition, and a more pure form. In this sense the STAR CARPET WITH ENDLESS DESIGN on page 267 is closer to being merely pretty.

We see this purity, above all, in the shape of the red field, between the dark blue stars. In the carpet in the Metropolitan Museum, for instance,[143] the comparable area does not have

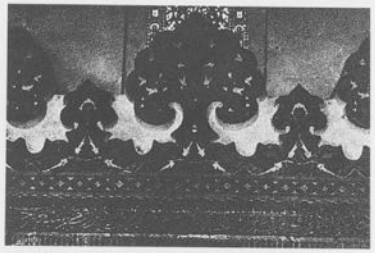
Shape of the red space in the Metropolitan carpet

Shape of the red space in this carpet

143 McMullan, *Islamic Carpets*, Pl. 67, p. 231.



The main star figure



Faience of the Yesil Turbe at Broussa

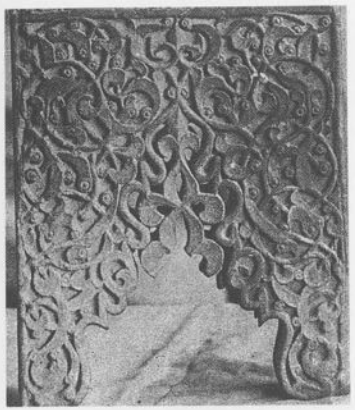
the same beautiful shape — but is much closer to being left-over space, left over after the drawing of the dark blue stars. In this carpet the red is just as important as the blue — indeed, it is this red, and the shape of the red space, which mainly gives the carpet its power. The strong attention to positive space would normally indicate a relatively early date for the carpet.

It is also the weaver's attention to the beauty of the red space, which causes the unusual and irregular drawing of the blue stars and diamonds — which are more asymmetrical, and more widely drawn than is usual.

A person who is not looking at the shape of the red space, will see the irregularity of the blue figures, and could possibly conclude that they are loosely drawn, by an inferior draftsman. But another interpretation may be more accurate. When you draw, paying equal attention to the red of the field and its shape, and the blue of the figures and their shape — the blue figures will become rough, or unevenly shaped, because half the weaver's eye is going to the importance, and feeling of the red space. In this case, the unevenness of the blue figures, could be an indication of the more careful state of mind of the weaver, and suggests that the weaver was looking for the interlocking and unity of space in his design — not concentrating on merely replicating the figures of a known formula.

The apparent paradox, that the more roughly drawn carpet is more precise, than what seems like a more carefully drawn carpet, in which the blue is accurate, but the red forgotten or less beautifully shaped, is an example of the misunderstandings of carpet art which can arise

Star Ushak from the Metropolitan Museum



Carving from mosque of Ala-uddin, Konya, 13th c.

Tilework with identical drawing, Green Turbe, Bursa, 1424

when analysis does not include a proper grasp of the weaver's actions and intention.

This kind of misunderstanding can also lead us to place carpets in quite the wrong order from the point of view of quality. Compared with the Metropolitan Museum carpet, or possibly with the carpet from this collection shown on the next pages,[144] the carpet shown here has more force, and carries the indivisible character of space to a slightly deeper level.

It has generally been assumed that the Ottoman carpets, or post-Ottoman carpets, are essentially derived from carpets of Persia, as a result of a cultural influence that occurred after the fall of Tabriz to the Ottomans, in 1514. According to this theory, the star Ushak is a Turkish "version" of the Northwest Persian medallion carpets of the 16th century, and must therefore come from the same or later date.

However, I believe that this attribution is based on a misunderstanding of the powerful role that the Seljuk tradition played in the shaping of these carpets. The form itself, and the underlying pattern, comes from a more ancient source, in Turkey itself. Let us look, for example, at the yellow tendrils which occur inside the stars and diamonds of this carpet. They are not unlike those which occur in other star Ushaks. If we examine these yellow tendrils, we can see that they must come directly from the Rumi scrollwork, typical of the great period Seljuk carvings, rather than from the floral motifs imported by the Ottomans.

This bit of information may also help us place a more spiritual emphasis on the achievement of these carpets.

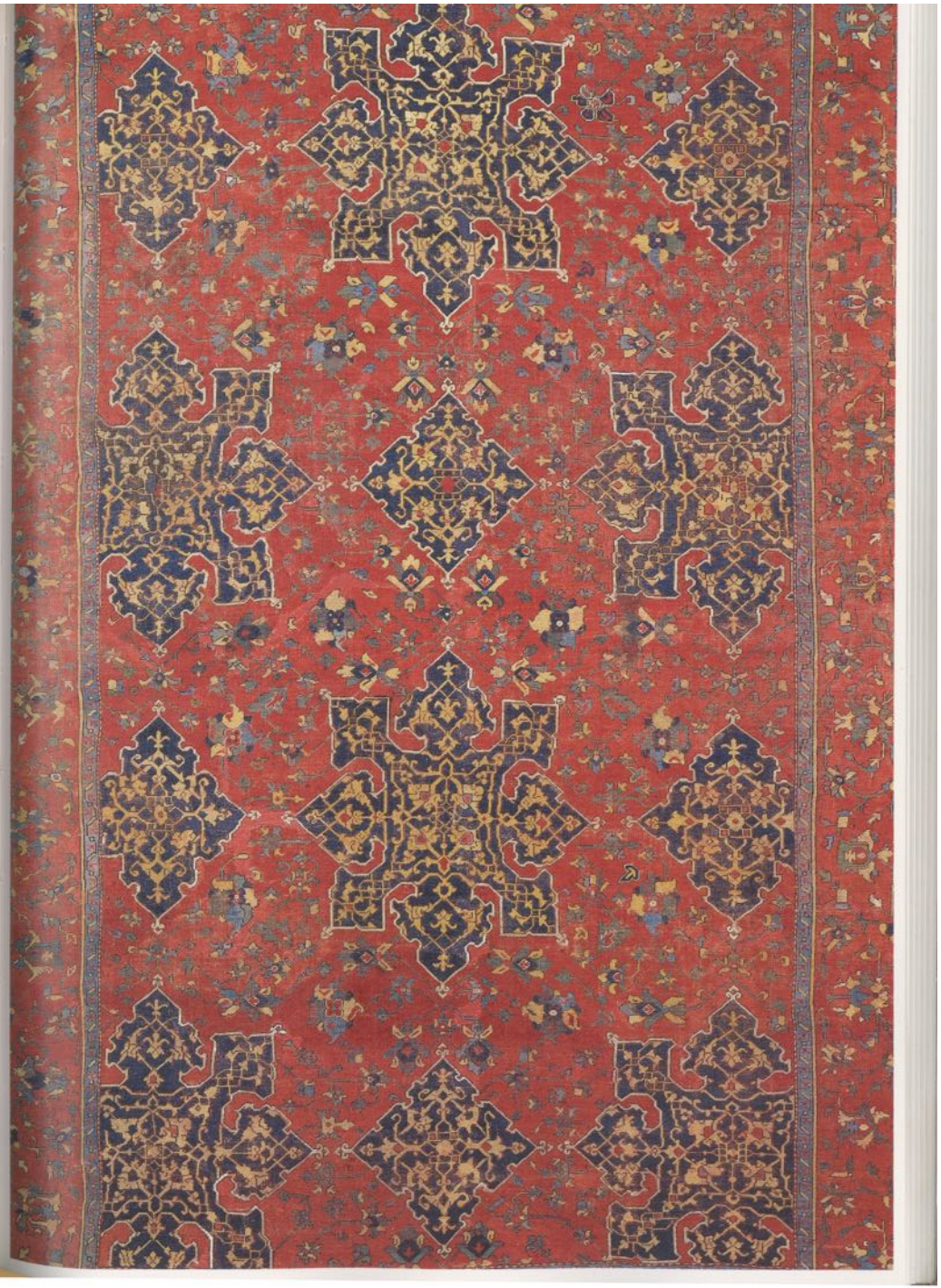
144 See page 267.

STAR CARPET WITH ENDLESS DESIGN

USHAK
223 cm x 348 cm (complete)

This carpet is more conventional and apparently better in accepted carpet-scholarship terms than the previous STAR CARPET WITH CENTRALIZED DESIGN. However, according to the criteria presented in this book, I believe there is a possibility it is less serious, not more.

The Ring of the Doge, painted 1534, with an identical carpet



WHITE FIELD BIRD CARPET

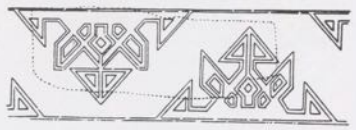
USHAK
222 cm x 356 cm (complete)

This is a white field carpet, of a type which exists in many of the world's museums, for example the Metropolitan, Budapest, Textile Museum, Vienna. The only bird carpet known to me which has *exactly* identical drawing (with the vertical birds also reversed) and identical weave and colors, is the small fragment illustrated in Jacoby.[145]

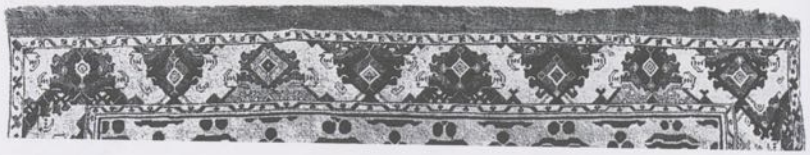
The physical weave of the carpet appears identical with both the Chintamani design carpet and bird carpet in the Textile Museum — the same ribbed structure, smoothed, in which each knot appears as a square, because wefts, like depressed warps, caused a depression in the structure. Colors also, are the same as in the Textile Museum Chintamani carpet — the rust red, the shimmering pale blue.

I have presented a detail of this carpet, in color, because the published examples of the bird carpets, almost never show their beauty of color. The colors appear in very small amounts, which are brilliant and lovely when seen close to — but which seem to get dominated by brownish red when photographed from a distance. Thus the Biertan fragment, the Keir collection fragment, and even the McMullan carpet, all look vaguely brownish red from the pictures — and the beautiful interweave of red, yellow, light blue, dark blue, violet, and deeper yellow, all in tiny quantities, is not generally visible in pictures.

The original name "bird" carpet, was given because of the superficial resemblance of the principle motif to birds. Wilhelm von Bode then corrected this view, by claiming that they were actually frozen "leaf motifs." I agree with this view of Bode's, and have myself also called the green carpet of this type a "leaf" carpet.[146] I should now like to extend this leaf conception, by pointing out that, in this type of carpet, as in



Similar border in one of the Lamm's Fostat fragments



Identical border in a 16th century Chintamani carpet

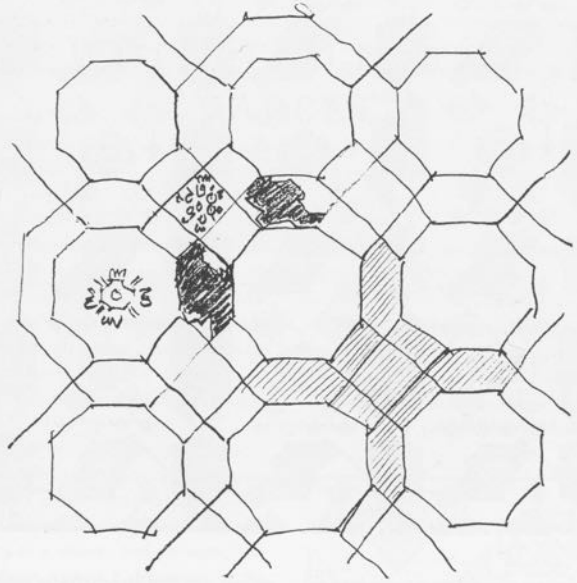
145 Heinrich Jacoby, *Eine Sammlung Orientalischer Teppiche*, Berlin, 1923, Pl. 24.
146 Page 163.

Lotto and Holbein carpets, we actually have an example of the three-centered lattice based on octagons, of the type which seems to originate with Timurid carpets.

Thus, the principle design elements of a bird carpet are not birds, but *octagons*. The emphasis on birds, comes from the present bias in western perception, where we always look at objects first, and space second. The octagons, which are white, appear to us as background rather than as figure, and therefore seem less obvious to us, than the birds. However, at the time of its making, when space was more accurately perceived as a homogeneous medium, in which pervasive structure could appear — figure, ground, or ground and figure intertwined — the octagon was clearly the most salient aspect of the design. Further, when we look carefully at the rather strange shape of the bird's "feathers" — we see that they are placed exactly where they are *in order to create a four-pointed star, which lies between the octagons* (see diagram on page 270).

Once again, as in the case of the Lotto carpet, we may date bird carpets, by the extent to which these octagons and stars are still intact within the structure. This is useful, because with these carpets, as with almost no others, there is a wealth of

Beauty of color on one basic octagon of the carpet

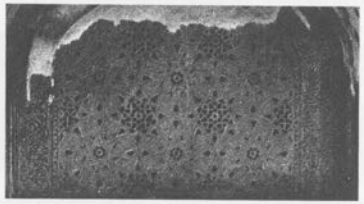


The underlying grid showing how stars and birds come out of octagons

uncertainty about the real and the fake, and the date. This has happened, in part, because these carpets were so frequently copied, faked, because of their value and rarity.

The octagon structure of this carpet is far more complex and subtle than one might imagine. Beyond the grid of white octagons, which is oriented parallel to the sides of the carpets, there is, in this carpet, a second larger grid of overlapping octagons. In this second grid, the octagons lie at about 45 degrees to the horizontal, when one twists one's head to the right. They are large, flattened octagons, whose sloping sides are made by the "birds." The octagons in successive layers of the grid, overlap in the birds. Note that the pattern is not symmetrical — the same structure does *not* occur when we twist our heads to the left.

The only comparable arrangement that I have seen — and it is not the same — is the very complex pattern of tilework which exists on the back wall of the ivan of the Sircali Medreseh in Konya, built 1242.[147] There we also have an arrangement of slightly overlapping octagons, also at about 30 degrees to the horizontal. However, the grid is even more complex, since the octagons at successive positions in the grid, lift slightly as one goes from left to right.

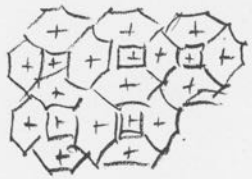


Tile pattern with angled octagons, Sircali Medrese, Konya

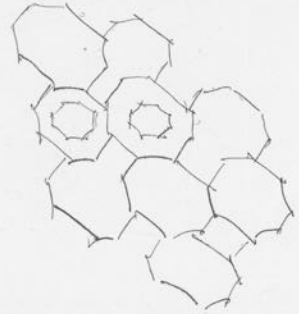
147 It is faintly visible in Aslanapa, *Art and Architecture*, Pl. 1.

It is very important to realize that this second grid of octagons is not present in the "normal" arrangement of the bird carpets. In the normal arrangement, the four birds around the major center, rotate uniformly, in a whirligig arrangement. When I first bought this carpet, I thought that it was degenerate because it did not have this rotating whirligig structure. I became curious when I found that the small fragment illustrated in Jacoby, which is evidently very old (and was apparently prized by him) has the same non-rotating structure as my carpet. When I saw the second grid of octagons[148] I realized that this was a structure of great complexity and beauty. In view of the possible relation of this second half-rotated grid, to the Sircali Medreseh, it may even be true that this design, is not the later, but the earlier and *original* design — which relates directly to the most complex grids of the Timurid art.

As one can see from this drawing, it takes considerable skill to make these two grids of octagons remain consistent with respect to each other, as they do in this carpet. This analysis should make it clear that the earliest bird carpets come from a very complex tradition, and are perhaps even greater in complexity than the small pattern Holbeins or Lottos, which have always been regarded as the most complex examples of the multi-centered grid of octagons.



An earlier carpet grid from a Timurid painting



Second system of octagons overlaying the first at 45 degrees

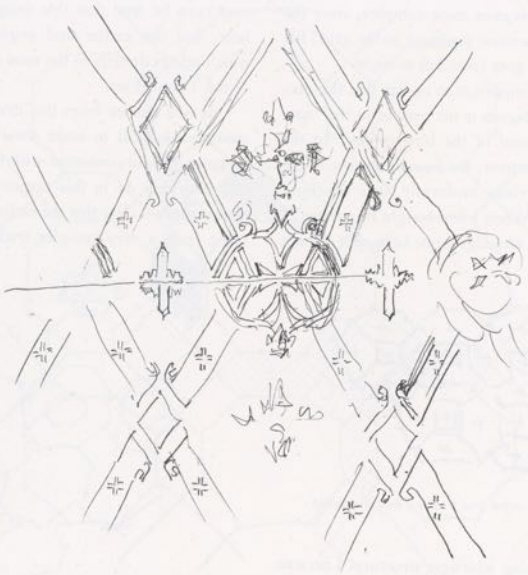
TURQUOISE LATTICE CARPET

ALCARAZ
161 cm x 241 cm

This carpet shows the first signs of the degeneration of carpets that started in the 16th century. The carpet has beautiful elements, and the subtle relation of turquoise green and brown ground produces a remarkable color.

However, when we examine the motifs

148 It was pointed out to me, by Jim Blackmon, when we were looking at the other grid of octagons.



For comparison:
Earlier grid design of the 14-15th century Carpet with border of little red gods

carefully, we see how the positive quality characteristic of spiritual space begins to disappear sharply under the influence of the Renaissance, and the European silks and velvets which evidently helped to shape the layout of this carpet.

In its overall drawing, the carpet is a weaker version of the older drawing above, which probably existed in the 14-15th century CARPET WITH BORDER OF LITTLE RED GODS.[149] I have shown my diagrammatic reconstruction of THE CARPET WITH BORDER OF LITTLE RED GODS on this page, side by side with this carpet, to emphasize the difference.

If we compare the blossom motifs that appear in this carpet, with those of the same period DRAGON CARPET, we see how this carpet starts to be degenerate, even in its drawing of this one motif. The drawing is almost without force as

Great blossom motifs in this carpet start to fall apart

149 Page 171.

an archetypal center.[150] The brown space between the turquoise tendrils, has also become misshapen, and not made of centers — it has, for the first time become *background* to the forms. This is typical of the Renaissance style. Since "man" became elevated as the center of things, a sharp focus of attention on figure without ground became more and more common, while the unifying spiritual vision of the Middle Ages and of the Islamic world, in which every point of space was a spirit-carrying center, became forgotten.

BLUE FIELD CARPET WITH PURPLE STAR

KONYA
172 cm x 221 cm

In this carpet from the Konya district, the brown, purple and blue colors form an extraordinary effect, and the mass of detail, is highly geometric but nonetheless soft in overall character.

Drawing of goddess figure in the carpet's end-panel

The softness of the drawing, especially in the field ornaments, betrays the influence of the Ottoman culture, and shows the beginnings of the move away from spiritual purity, towards more decadent forms in which the carpet no longer has bite or artistic force, but instead a sophisticated prettiness. We see the same problem in the almost workshop-like perfection of symmetry throughout the field, which seems forced rather than organic. I do not want to exaggerate this. It is a magnificent and beautiful carpet. But it is instructive to see the first touches of degeneration, almost before they happen, and even though they are, at this stage, still very minor.

In the ornaments at the ends, and in the drawing of the major border, we still see the full force of the Central Anatolian inspiration. It has a close similarity to the goddess figure from an early kilim, shown on page 195.

150 See discussion under DRAGON CARPET, page 250.

SAPH MIHRAB WITH PLUM BLOSSOMS

USHAK
74 cm x 146 cm

This single mihrab from a large saph comes from the same saph as the other single mihrab now in the Turk ve Islam Museum[151] and the three niche fragment in the Textile Museum.[152] Tile works of similar sprays of plum blossoms were almost exclusively made in the 16th century.

The beauty of geometrical tracery and line, which produced wholeness so strongly in the earlier 15th century carpets, is still visible in the drawing of the lamp. Here, intricate overlaps, similar to those found in kufic and knotted line-work, create a kind of unity which holds the attention. It works, because the lines create so many compartments, which create continuous, multiplying fields of centers.

Another 16th century tile panel with plum blossoms

Almost identical 16th century tile panel from Topkapi Palace

151 Aslanapa, *Turkish Arts*, Pl. XIb, p. 79.
152 Louise W. Mackie, *The Splendor of Turkish Weaving*, Washington, D.C., 1973, Pl. 40.

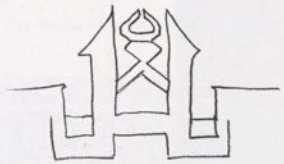
The wonderful delicacy of the sprays of plum blossoms, is lovely. As we see, they are very loosely placed, so, almost like a Japanese textile, the endless asymmetries combine with the simple symmetries of the blossoms, and the symmetries of the spaces between the blossoms, to hold the attention very strongly. Previously published.[153]

153 Eskenazi, *Il Tappeto*, Pl. 14, and *Lefevre*, November 23, 1984, Pl. 32.

RED CARPET WITH SPOTTED PURPLE BAND

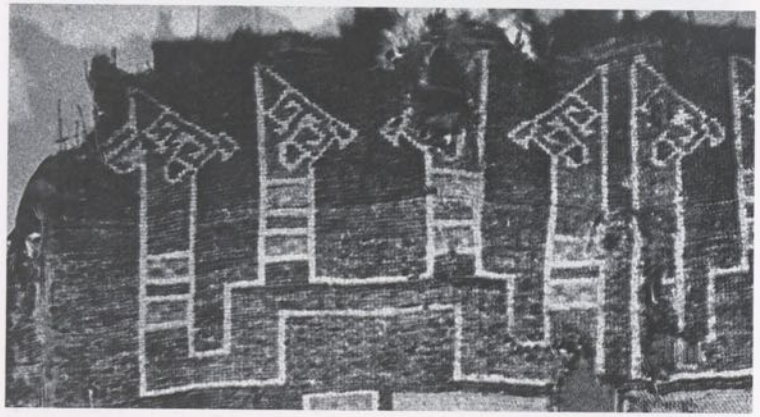
KONYA
145 cm x 263 cm

This carpet has a wild, rugged character, not often seen in other carpets. The drawing of the main field design is a version of the great Seljuk borders. What was once a small border element in the 13th century is now half the carpet. Nevertheless, the rugged almost harsh "being" that appears in the great Seljuk carpets, lingers on here into the 16th century. The use of spots harks back to the Middle Ages.



Main border element from Seljuk carpet, 13th century

Border of another Seljuk carpet



Massive elements in Seljuk border, later transformed

COMPARTMENT CARPET WITH FLOWERS

NORTHWEST PERSIA
97 cm x 215 cm

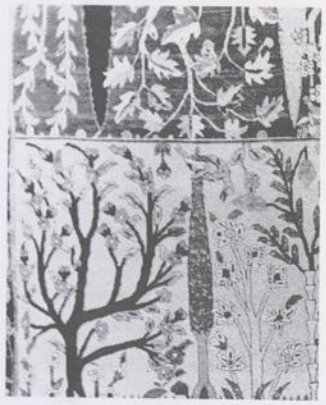
The layout of this carpet is directly related to the abstract compositions of cross and star compartments that appear in Timurid paintings.

In the issue of *Hali* celebrating its first ten years, this fragment was described as "among the most beautiful objects advertised during 1979."[154] I believe its beauty derives from its structure: the graphic invention of the flowers, at one and the same time realistically drawn, and yet powerfully composed in their geometry.

Looking at this floral composition, and its details, from the point of view of its inner symmetries and centers — we can see clearly how the presence of centers animates not only abstract and geometrical compositions, but even these realistically drawn compositions of flowers and trees.

The drawing of trees and flowers in this carpet, is almost identical in style, to that of the great Jaipur garden carpet,[155] generally considered to be a 16th century carpet, made in South Persia. The near identity of drawing makes it likely that the present fragment comes from the same time and place.

The endlessly repeating cross and star octagon design far predates even the Timurid era. Examples occur in a 9th century stucco design from Samarra,[156] and in Seljuk tile fragments

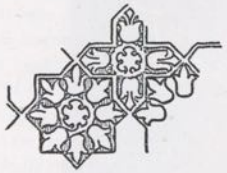


Almost identical drawing on the Jaipur garden carpet

Compartment carpet, Museum of Applied Arts, Vienna

154 *Hali*, Issue 42, 1988, p. 89.
155 Illustrated in Dimand and Mailey, *Metropolitan Museum*, fig. 114, and in Erdmann, *Seven Hundred Years*, figs. 75, 76.
156 See Briggs, "Timurid Carpets," fig. 20.

Compartment carpet, Metropolitan Museum



Stucco design from Samarra, 9th century

Timurid painting showing comparable cartouche forms

from the ruins of Kubadabad Palace on Lake Beyshehir.[157] Previously published in various places.[158]

The three other fragments of this carpet, which originally came from the Von Hirsch collection, still exist in London and Milan. Eskenazi has published a sketch which allows us to visualize the carpet in its original form.[159]

SMALL MEDALLION CARPET WITH YELLOW BORDER

USHAK
141 cm x 182 cm

See discussion in chapters 8 and 13.[160]

157 Illustrated in Aslanapa *Turkish Arts*, Pl. 1, p. 109.
158 Eskenazi, *Il Tappeto*, Pl. 24; *Hali*, Vol. 2, No. 1, 1979, advertisement p. 66.
159 Eskenazi, p. 43, fig. 1.
160 Pages 52 and 80.

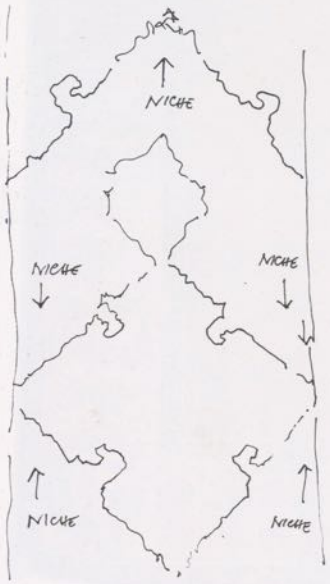
POLE MEDALLION CARPET

USHAK
166 cm x 337 cm (complete)

In chapter 8 of part 1, I have shown how the smaller double-niched Ushaks achieve some of their unity of space by a complex figure ground reversal, in which the niche, and its spandrel, have the same shape in reverse.[161] A similar phenomenon occurs in this carpet in an unusually complex way.

If we look at the space near the central medallion, we see that the half niche, has been repeated, at the side of the medallion, so that there is an inverted drop repeat. This makes the resulting space much more strongly knit together than it would be otherwise. It is interesting, and deceptive too, because as a result of the half drop repeat, the motif creates the niche at the top of the carpet (where the field is figure), and then creates the medallion in the center of the carpet (so that the field becomes ground, with the very same motif inverted).

The cloudband motif, something we usually think of as curvilinear, is actually a highly complex geometric structure of centers, not strongly curved at all. The carpet has been previously published.[162]



Interlock of niche shapes

Organization of the cloudband as a structure of centers

161 Page 52.
162 Peter Bausback, *Anatolische Knupfteppiche Aus Vier Jahrhunderten*, Mannheim, 1978, p. 19, and in Christine Klose, "Centralized Designs on Turkish Carpets," Pinner and Denny, eds., *Studies I*, p. 77, fig. 3.

BLUE KEYHOLE MEDALLION CARPET

BERGAMA
155 cm × 197 cm

One of two carpets of this type that are known to me. The other, in the Turk ve Islam collection, is also fragmentary.[163]

A portrait of Henry VIII, now hanging in Petworth House, Sussex, painted by a contemporary of Holbein's in the second half of the 16th century, contains a carpet which is very similar.[164] The Henry VIII carpet appears to have three octagons, with similar drawing; it has the same horse mane motif around the octagons; it has the same knot drawing in white on red, which appears within the octagons, and the borders, though different from those of this example, have the same graphic quality.

Present-day carpet scholarship would typically date this carpet as 18th century. Yet, as the picture shows, a comparable carpet already existed in England somewhere about 1550.

This type of carpet is the ancestor of many 18th and 19th century medallion Kazaks, whose evolution has been traced by Tschebull.[165]

Once again, I shall try to show why earlier designs are objectively more powerful, and that

16th century portrait of Henry VIII with similar carpet

Similar carpet in Turk ve Islam Museum

163 Yetkin, *Caucasian Carpets*, Vol. 1, fig. 210.
164 Michael Franses and Robert Pinner, "Portraits of King Henry VIII," *Hali*, Vol. 3, No. 3, 1981, p. 178, fig. 5.
165 Raoul Tschebull, "The Development of Four Kazak Designs," *Hali*, Vol. 1, No. 3, 1978, pp. 257-261.

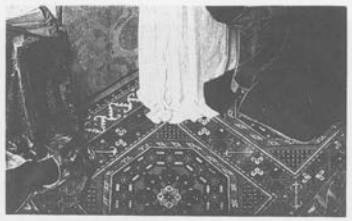
an interest in age is not merely snobbish pretention. Let us compare the design structure of this Bergama, with the structure of the best Kazaks of the type which evolved from it.

The extreme boldness of the later Kazaks is missing from this design. This boldness of the

Border of this carpet: note the emphatic white Z-form

The white Z-form

Kazaks appeals to that part of our twentieth century sensibility which focusses on boldness, instead of oneness. However, the space of the Bergama is far more deeply knit together than that of the Kazaks — and this is what gives it the deeper feeling. This is achieved by a more subtle multiplicity of centers. For instance, in the octagon, the structure of the octagon is more gentle, and more intricate, like the octagons of large pattern Holbeins — and this greater intricacy, caused by the white whorls, creates a system of centers around the edge of the octagon whose structure repeats and reinforces the octagon outline itself.

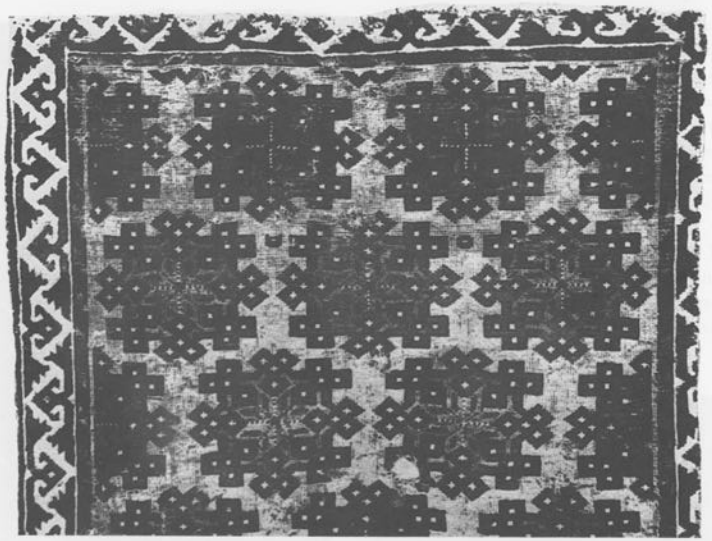


16th century Mass of St. Giles showing a similar border

Border of the St. Giles carpet: note the white S-form

The white S-form

The unusual border is also fascinating. It is similar to the border which appears in the large



Carpet in East Berlin with similar border

pattern Holbein carpet illustrated in the Mass of St. Giles, painted about 1500. The same border appears on the 16th century "wild" small pattern Holbein in East Berlin.[166] The St. Giles border contains a white S-form which spans between the black forms, and the border of this carpet also contains a white S-form, spanning between the black forms.

TRELLIS CARPET

WESTERN ANATOLIA
135 cm x 180 cm

This is a trellis pattern carpet of a type known from one other example in the Turk ve Islam Museum.[167] The Book of Hours of Mary of Burgundy, painted about 1460, also shows a diamond trellis design carpet, apparently of similar type.[168]

This carpet, unlike the TURQUOISE LATTICE CARPET[169] which it slightly resembles, has a

166 Erdmann, *Seven Hundred Years*, fig. 51.
167 Illustrated in Yetkin, *Turk Hali*, Pl. 46.
168 Christine Klose, "Teppichdarstellungen," p. 82, fig. 4.
169 Page 273.

near-perfectly drawn field, and in it the great tradition is still largely intact. We may see this most particularly in the drawing of the guls inside the diamonds of the trellis. These complex structures still have an extraordinary amount of centers in each one, and create a system of local centers that vibrates and extends from cell to cell.

It is worth studying the sophisticated nature of the basic form which is used to create the lattice. This form, illustrated below, is rather similar to the C-wrench forms that appear in the SELJUK PRAYER CARPET. The number of centers which appear in this innocent-seeming cross alone, shows dramatically how seriously the very early carpet weavers took the problem of unifying space, and how the apparent simplicity of the lattice comes about as a result of a highly complex order, produced at great elaboration, which then melts away and becomes almost invisible when it is successful.

Book of Hours, Mary of Burgundy, trellis pattern carpet

16th century trellis carpet in the Turk ve Islam Museum

Repeating center which appears within the trellis

Seljuk house motif from 13th century carpets

Both major and minor borders are slightly pinched, showing the start of a degeneracy. However, note the minor house-like border which otherwise appears only in 13th-14th century Seljuk carpets. Here again, a tiny device is made of highly complex centers, both in the figure and between the figures.

CARPET WITH BLUE AND YELLOW CHEVRONS

ORIGIN UNKNOWN
126 cm x 160 cm

This interesting piece is something of a puzzle. It has no outlining, bright blue and green dyes and faded, corroded, red, fluffy Turkish wool warps. At different times, I have thought it might come from North Africa, from Venice, from Damascus, from Eastern Anatolia. At one time I even thought it might be a true Seljuk carpet, and that all the so-called Seljuk carpets were actually something else.

Perhaps most noticeable in the overall design, is the strong use of the four corners, and the four center points of the borders. This extreme use of symmetry which gives the carpet its power, is rare in Turkish carpets, though it is seen in paintings of them. Carpets which do commonly use perfectly worked-out corners in the border and central border symmetries are Ottoman and Mamluk. Is the carpet from North Africa?

I know only one other case of a carpet with a chevron border; it appears in a painting by Fra Angelico.[170] But the chevron border of the carpet appears in almost identical form, in a silk clavis attributed to Syria or Egypt, 7th century.[171] Other twills from the same period contain closely related border ornaments.[172] The clavis which contains this border also contains a leaf form, similar to the one that appears in the spandrels of the carpet, and a version of the Rumi lotus motif. It seems highly unlikely that all three of these motifs, with rather similar drawing, could appear by chance, in an unrelated textile, nine hundred years later. What is the explanation? Is the carpet Syrian?

Fragment of a silk clavis, Syria or Egypt, 7th century

Border of the 7th century silk

170 Erdmann, *History*, p. 55, fig. 48.
171 Weibel, *Two Thousand Years*, Pl. 53.
172 *Ibid.*, Pls. 45, 46, 56.

Striking about the carpet is the extreme contrast between the strongly vegetal tracery in the field and spandrels, and the bold geometric character of the chevrons in the border ornaments. This contrast of geometric and vegetal occurs in very few carpets. *It does however occur commonly in the Seljuk buildings of Anatolia.* A vegetal form very similar to field and spandrel drawing, appears in the Seljuk carving on the Cifte Minare Medreseh, illustrated on the next page. Contrast between geometric and vegetal appears in the porch of the Sircali Medreseh, Konya, built 1242—also illustrated below. In this building there is again a play between geometrical chevrons in the border columns, and floral or vegetable motifs nearby.[173] In fact this bold contrast of geometric and vegetal is more the core of the true "Seljuk" character of buildings, than are the geometries of so-called "Seljuk" carpets. Is the carpet after all Turkish?

173 See the illustration in Arseven, *Arts Decoratifs*, p. 103, fig. 290.

Ottoman carpet

This carpet

Ottoman carpet

This carpet

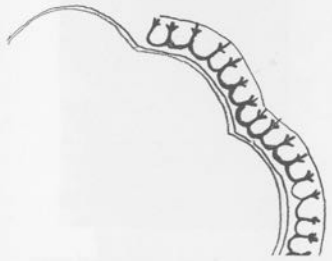
The carpet does contain the great blossom-arrow motif. The blossom-arrowhead motifs in the left-hand drawings above come from a 16th century Ottoman carpet, those on the right come from this carpet. On the whole, the symmetries in the right hand designs are more complex.

The serrated "fringe" around the central medallion bears an obvious resemblance to the fringe around the large medallion Ushaks. However, the fringe around the Ushak medallion, is always made of two motifs, which alternate. In this carpet, the fringe is made of a single motif, repeated without alternation. Under normal circumstances, this loss of detail, or loss of a complex symmetry, would typically happen because the carpet was made later, thus suggesting that this carpet is a later and degenerate version of the Medallion Ushak design. However, another piece of evidence leads in the opposite direction. The only carpet on which I have

Cifte Minare Medreseh
closely resembling field and spandrel design

Fringe on large medallion Ushak

Fringe on this carpet



Fringe on Textile Museum Mamluk

Sircali Medreseh, Konya, angular and vegetal combined

Fringe on large pattern Holbein

been able to find a fringe design like this one, is a Mamluk dated about 1500, in the Textile Museum.[174] This Mamluk carpet has the fringe, curvilinear as here, drawn around the lobed central octagon, and in this case too, the fringe is composed of a single motif, not a double one, endlessly repeated.

174 See Ernst Kuhnel and Louisa Bellinger, *Cairene Rugs and Others Technically Related*, Washington D.C., 1957, Pls. XII and XIII.

CARPET WITH BLUE LOTUS BLOSSOMS ON GREEN FIELD

EASTERN TURKESTAN
114 cm x 157 cm

The elements of this carpet are unique among other carpets from Eastern Turkestan in color, in the design of the blossoms in the field, in the design of the corner motif, and in the design of the border. It also appears that it may be one of the earliest carpets from Eastern Turkestan. It has a cotton foundation, and would seem to belong to the ancient tradition of Buddhist lotus blossom seats described in Bidder.[175] Since it has been cut, it may have had three blossoms when complete.

The carpet's unique form also has a number of interesting art-historical connections, and strongly suggests a connection between the art of Eastern Turkestan and the art of Anatolia. Jon Thompson, in private discussion, has told

Felt carpet from the Shosoin treasure, 8th century

Felt rug design, Shosoin Treasure, 8th century

8th century felt rug design, also from Shosoin treasure

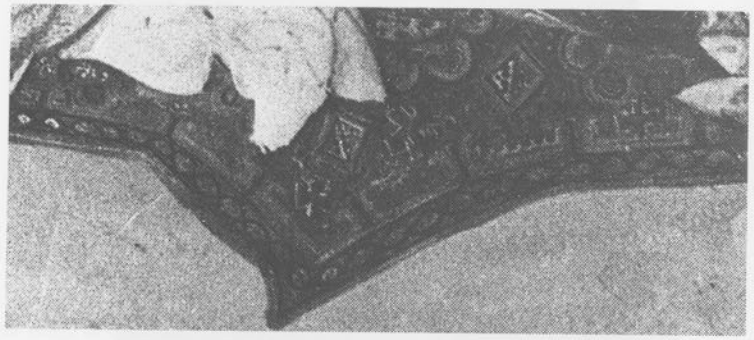
175 Hans Bidder, *Carpets from Eastern Turkestan*, London, 1964, pp. 15-56, especially p. 54.

me that he considers it related to the felt rugs of the 8th century in the Shosoin treasure.[176]

A drawing of this blossom design in a carpet appears in a French miniature of the early 16th century, in the Primer of Claude of France, dated 1505.[177] The French miniature depicts a carpet, also in green and mid-blue, just as this carpet is, and with the very same curved lobes on the blossoms. Two similar carpets, both also on green grounds, are shown hanging over rails in paintings by Fra Angelico.[178] One is illustrated on page 299.

One of the most interesting and important things about the carpet is the drawing of the corner detail, which is reminiscent of later 18th and 19th century Khotans. However, what is remarkable, is the way that the drawing shows a fleur-de-lys design going both in and out. First,

176 Illustrated in Erdmann, *Seven Hundred Years*, fig. 100, and in Dimand and Mailey, *Metropolitan Museum*, figs. 275, 277.
177 See Christine Klose, "Einige Teppichdarstellungen in franzoesischen Stundenbuchern des 15. und 16. Jh.," *Hali*, Vol. 2, No. 1, 1979, p. 81, fig. 1.
178 Missal 558 in the National Library in Florence, painted about 1430, and The Massacre of the Innocents, painted about 1452, both illustrated in Jacqueline and Maurice Guillaud, *Fra Angelico*, Paris-New York, figs. 5 and 173 for reproductions.



From Primer of Claude of France, green carpet with blossoms

there is the larger fleur-de-lys, which juts into the field — and then, in the negative space, jutting back into the larger design and pointing towards the corner, there is a smaller fleur-de-lys. It is a remarkable tour de force for the weaver to make both these things happen at the same time. The motif is strongly related to the BYZANTINE-TIMURID PROTOTYPE.[179]

The border again contains fleur-de-lys motifs. Remarkably, the border is nearly identical to the border of a 16th century Turkish carpet — the famous Pohlmann collection carpet.[180] That border too is a linked chain of octagons, with fleurs-de-lys alternating in direction within the octagons. Perhaps coincidence, but the layout of the blossoms on this piece is also identical to the layout of the medallions in the Pohlmann piece. It is very remarkable that two carpets, one from 16th century Anatolia, and this one from Eastern Turkestan about the same period, should have nearly identical borders. It suggests an artistic linkage between Turkestan and Turkey possibly stronger than what has been suspected, and seems to shed light on the connection between the Seljuk art of Mongolia, and the evolution of art in Anatolia and Timurid Persia.

The larger fleur-de-lys

The smaller fleur-de-lys juts into the larger one

179 See diagrams in chapter 8, page 56.
180 Illustrated in Bode and Kuhnel, *Antique Rugs*, fig. 12.

Border of the Pohlmann rug

Border of this carpet

The field design of this carpet is also clearly related to Timurid types. Briggs' Timurid type V consists of a diagonally endless array of blossoms or roundels, exactly as we have it here. The

Similar carpet in a painting by Fra Angelico, 1350

The Pohlmann carpet, Berlin

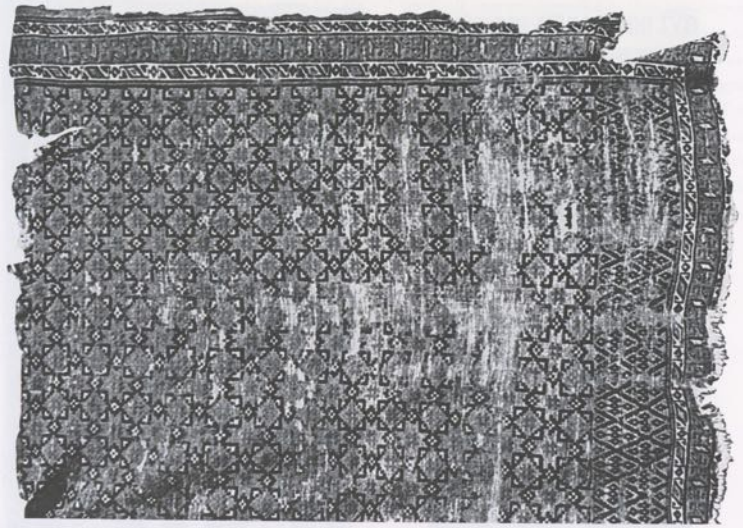
design appears in three separate 15th century Timurid miniatures quoted by Briggs.[181]

All in all, I consider that this carpet somehow has a distinctly Turkish feeling. This is of course possible, since the Turks and their rug weaving arts came from Turkic people who lived in Mongolia between 500 BC and 1000 AD. The carpet, originally found in Cairo, may have actually been brought by one of the waves of settlers who made the long journey from the mountains of Turkestan, to the Middle East.

There has always been speculation that the great thread of Turkish carpet art had its origin in the Seljuk work of the Turks of Mongolia and Eastern Turkestan, and then migrated through Timurid and Sassanian art, to Turkey, where it found its final resting place. This small carpet possibly helps to confirm this sequence.

CARPET WITH RED STARS AND CROSSES

WESTERN ANATOLIA
147 cm x 112 cm



13-14th century carpet in the Vakiflar Museum

181 Briggs, *Timurid Carpets*, figs. 58, 59, 60.

In my opinion this pattern (not the carpet) deserves to be remembered as one of the original archetypes of the golden age. The other known carpet with this design is an unusual Seljuk version found in the mosque at Divrigi and now in the Vakiflar Museum,[182] which has the design in blue on blue. Friends who have handled it say that the Vakiflar carpet is indistinguishable in texture and colors from the 13th century Konya carpets. The present carpet, later in date, has the same eight-pointed stars alternating with stepped diamonds, all based on very tiny squares — but in this carpet the design is organized less tightly, and less coherently.

To understand what the weaver was doing, we first need to understand the pattern. At first sight this pattern looks like a pattern of boxes. Really, though, the most important element in the pattern are the red stars between the boxes. It is these stars which create the spacing and overall form most strongly.

The boxes are placed to form these stars.

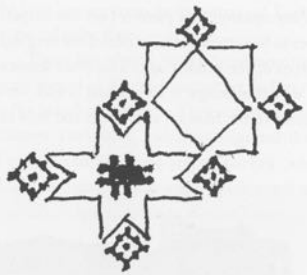
Then within the boxes there is a diamond pattern, which reflects the diamond that makes the ends of the stars. In the middle of the star is the numeral-like figure (#). This figure forms a reflection of the red star, in miniature, just as the large diamond is a reflection of the small diamond.

In the border there are some motifs which reflect the same family of shapes. The S-shape that is drawn, for instance, also has a square at its center. The interlocking lizard figure in the outer border also forms centers very strongly.

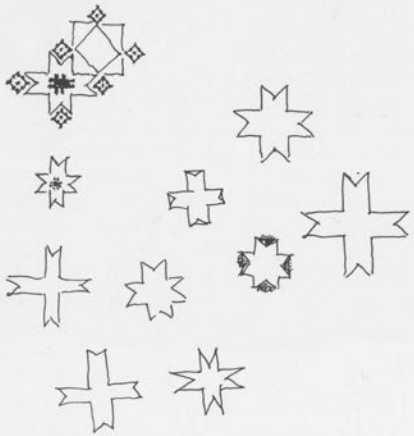
182 First published in Yetkin's English translation, *Historical Turkish Carpets*, Pl. 77, and since then in Balpinar and Hirsch, *Vakiflar Carpets*, Pl. 4.

First, the space between the lizards is itself a lizard shape. The lizards interlock perfectly, so as you make one center, you simultaneously make another. Also, the lizard is made of little triangles, which perfectly reflect the triangles that exist throughout the main design of the carpet.

All in all then, the weaver is making everything of centers, *and is trying to shape the centers so that each one reflects the human person*. Each knot that is placed, is part of some shape which is being shaped to form a center. And, at the same time, the weaver is also paying attention to various systems of larger centers that also have to come out right.



Each part is calculated to feel related to my self



Different crosses which reflect "me" to differing degrees

For instance, the overall grid of boxes has a certain rhythm and spacing. This is not automatic. To get it, the weaver has to adjust the spacing and the size of the knots, all the time. Or, for example, there is an overall diagonal array formed by the triangles in the boxes. The weaver must choose colors for the triangles to make these diagonals appear in the carpet. Also, the alternating pattern of triangles which shows up in the boxes forms an octagon shape that ties four boxes together in fours. While placing the knots, the weaver must pay attention to these octagons too, and making sure that they appear in the carpet.

So, the overall activity of the weaver is to make centers all the time while she or he is working — and to place knots, choose size of knots, choose colors, in such a way that a series of overlapping larger patterns (and centers) make their appearance in the carpet simultaneously.

The carpet gives me a chance to illustrate the concepts of the book very concretely. There

is one all-important idea at the root of everything which I have been trying to describe in this book. It is the idea that a carpet is a good one when it is entirely made of centers which all reflect the human person. In the carpet, we see the following elements: squares, boxes, arrows, triangles, and, most important of all, the red star cross which appears between the boxes. The key thing about these many different elements is that each one appears as a *center* in the larger whole. That means, each one creates a relation with you, with your *person*.

What this means is that the shape of each center is made in such a way that you feel a relationship with it, you would like to establish a relation with it. It is comfortable. It reflects you. For example, the cross shape, as drawn in the carpet, is comfortable and looks like you. Compare with these other crosses, similar, but drawn less comfortably, so that they do *not* look like you. Not every cross of this type looks like you, or makes you feel a relationship with it. This one in the carpet, is chosen just right so that it "feels like you."

The diamond has the same quality. Not every diamond shape looks like you, or makes you feel a relationship with it. This particular diamond shape in the carpet is chosen, just right, so that it feels like you. If you try drawing diamonds yourself, in various shapes and styles, you will find — probably — that many of them are less "like you" than the chessboard diamonds which the weaver of this carpet has drawn. That is the weaver's achievement. The small square has the same quality. The large square has the same quality. The border elements have the same quality. The space between the border elements has the same quality.

The full explanation of this very remarkable phenomenon is given in *The Nature of Order*.[183] It seems like a modest idea, and one which is person-oriented: humanistic. But it is a much more powerful idea than that. This simple idea is the crux of everything that makes a carpet work. It is by no means automatic. Very often, when we look at the components, or elements, or wholes which appear in a carpet, they do *not* have this character. Instead they are more awkward, more alien, more distant from me. For example, if I look at the component pieces in the badly drawn Bergama CARPET WITH EIGHT PANELS AND RED INTERLACE from my collection which is illustrated in part 4,[184] the elements do *not* have this character especially. On the contrary, though possibly well-designed by a carpet-dealer's standards, the elements of that Bergama are drawn so that I feel distant from them, not related.

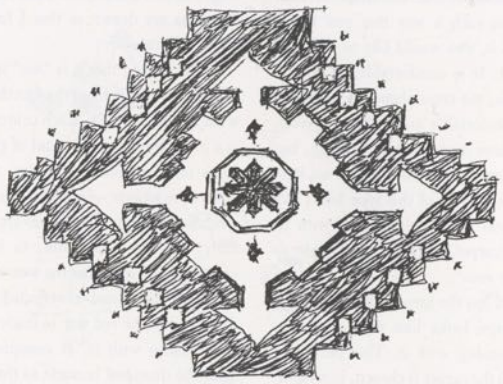
The feeling that it is "me" in each center of the carpet, comes from the fact that this is exactly what the weaver did. Each center that is formed is a piece which has the soul of the weaver in it. Each one is a piece, a center, a shape, which allows the weaver — and you, and me — to form a relation with it. The shapes are chosen, beautifully, and very carefully, to be solid in this emotional sense — that the weaver, and you, and I, can all find ourselves reflected in each individual center. The red star is made so that I have a relationship with it. It contains me. The box with the diamond is made so that it contains me and has a relationship with me. So is the lizard figure in the border. So is the space between the lizards. So is the S-shape in the smaller border. Each part of the carpet is placed, made, and shaped, so that as nearly as possible it lets me have a relationship with it.

As an example, this carpet is not so remarkable. But still, the way that every element, or center, is drawn just right to contain "me," is very instructive indeed. My main point, in part 1, was to show that any good carpet, which reaches any level of spiritual depth, has this feature throughout its drawing. This particular carpet, partly because of its simplicity as a composition, makes it easier to understand the argument.

183 See *The Nature of Order*, Oxford University Press, forthcoming, chapter on, "The Mirror of the Self."
184 Page 341.

TWO PANEL CARPET WITH ARROWHEAD STARS

WESTERN ANATOLIA
148 cm x 185 cm



The great cross figure

This carpet is very similar to a famous one in the Vakiflar Museum and to one other known example.[185] The motif with four arrowheads in each panel, forms a powerful and beautiful center. The vivid blue of the crossed arrowhead star is the most memorable part — the way this light blue shines out of the reds. The centers formed by this particular arrowhead figure are extremely dense and powerful — hence, I believe, the shining quality of the blue and red.

This center also gains its strength from the wave-like figures in the border that surrounds each panel. I believe these enigmatic wavelike figures, which appear only in the three known examples of this type of carpet, may actually

Horse-head motif

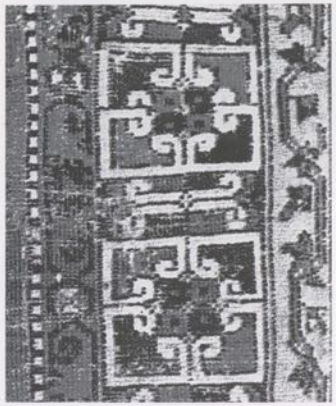
185 Yetkin, *Turk Hali*, Pl. 42, and Webb Hill, San Francisco.

be horses' heads. We see the horses in the space between the hook shapes. The birds or wave-like horse figures have the same morphological angle-character as the arrowheads, even though quite different, and therefore support the life of the arrowhead by a complementary effect.

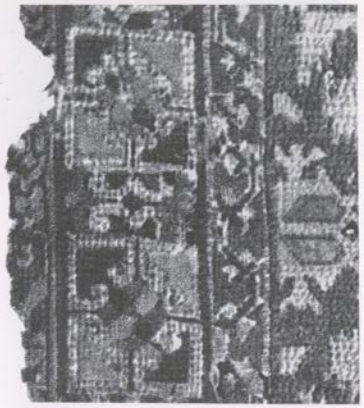
MEMLING GUL CARPET WITH NINE COMPARTMENTS AND KUFIC BORDER

WESTERN ANATOLIA
164 cm x 180 cm

15th century Memling painting with repeating octagons



Same border in an earlier "Bellini" prayer rug

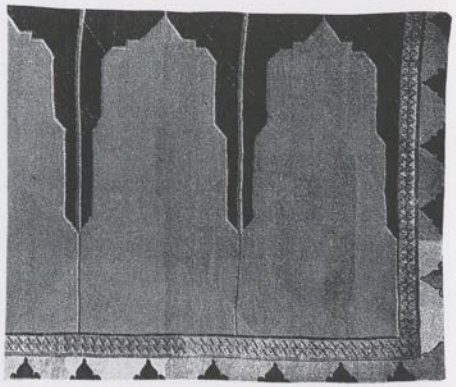


Same border, classic version, in a Lotto carpet

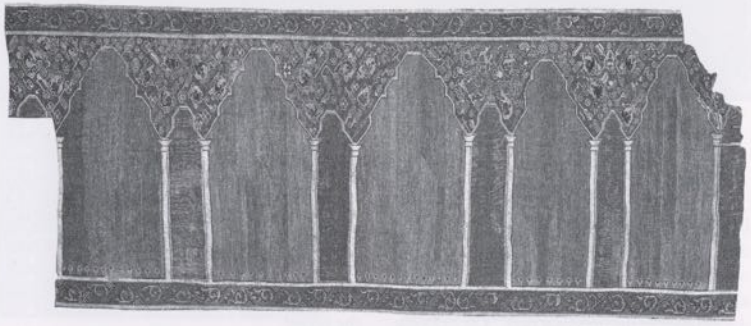
This beautiful thick carpet, is interesting both for its field and its late version kufic border. It is very similar to a classical, but uncommon, square "box" type of kufic border, that appears, for example, in the Lotto carpet border printed on the previous page. The drawing is unusual, in a village carpet. The minor border is an exceptionally nice and accurate drawing of the S-and-S border, in which positive space and ambiguity create a beautiful and flowing system of centers. The field is a Memling arrangement with an unusual half lap in the layout.

GREEN FIELD SAPH WITH COUPLED COLUMNS

ANATOLIA
371 cm x 153 cm (complete)



16th century saph now in East Berlin



Full extent of this carpet with five mihrabs

Saphs not belonging to the floral Ushak group are relatively uncommon. A few have unique designs and are preserved in important museums: one in Berlin,[186] one in Cairo,[187] and two in the Turk ve Islam.[188] This saph, is the latest and probably the least important of these big "unique" saphs: it is certainly not helped by the cabbage-like tracery which appears in the spandrels. Nevertheless, as the years have gone by, my respect for this carpet has grown. The unusual syncopation of small niches and large niches, evidently deriving in some way from the attempt to adapt a coupled-column prayer rug to the saph format, leaves a complex unity. That fact, the beautiful green, and the white columns staring out of the green, make it very harmonious. Even if late and perhaps degenerate, it is impressive—and I now think possibly of more interest than it seemed at first.

186 See Erdmann, *Seven Hundred Years*, Pl. XI.
187 See Richard Ettinghausen et al., *Prayer Rugs*, Washington D.C., 1974, Pl. VI.
188 See Erdmann, *History*, Pl. III.

CARPET WITH PURPLE AND WHITE OCTAGON

BERGAMA
129 cm x 199 cm

This so-called Holbein variant is a 17th century descendant of the type of carpet embodied in the 15th century LARGE OCTAGON CARPET of this collection.[189] All the elements of the original design are clearly visible: the central octagon, with its star center and rosette hooks around the edge, the two hanging lamp-forms at each end, and the four corner motifs defining the corners of the field. The carpet is notable for its unusual color combinations — purple, deep red, orange, light blue and black — and for the way in which the design concentrates attention on the octagon, which is floating in a relatively empty field. It is surrounded by an early border, visible in its purest form on the upper end of the carpet.

The unity visible in earlier carpets has begun to disappear. Large areas of the field are not "positive." Various elements, like the corner motifs, and the hooks which surround the octagon, have lost their figure-ground reversal power.

Two comparable carpets are preserved in the Turk ve Islam Museum.[190]

The origin of the central octagon carpet design is not altogether clear, though it probably stems from isolation of a single octagon from an infinite repeat.[191] It is also possible that this pattern, like the pattern of endless knots that appears on the so-called kufic borders,[192] may originate with medieval knot-like figures. For example, if we look at the 11th century Spanish miniature from the Beatus of Fernando and Sancha in Madrid,[193] we find an endless knot, in roughly octagonal format. This knot is not comparable *in its detail* to the octagons of the large pattern Holbein. But in overall structural organization and feeling, it is very similar, and contains a very similar system of local symmetries. The circumference of the classic large pattern Holbein octagon, with its remnants of knots and dots and the interior pattern of stars, squares and triangles also appears to be a ge-

Related carpet from the Turk ve Islam Museum

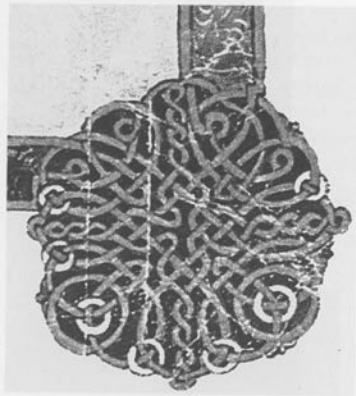
189 Page 209.
190 Yetkin, *Turk Hali*, Pls. 37, 38.
191 See also the explanation given under discussion of the LARGE OCTAGON CARPET, page 210.
192 See discussion on pages 226-227.
193 Williams, *Spanish Manuscript*, Pl. 32.

ometrized and degenerate form of such an endless knot. The octagon of this carpet, though degenerate compared with 15th century carpets, still shows the same structure, in a more abstracted form.

The border of the carpet is drawn in its early — and more powerful — doubled form at the top and bottom of the carpet. It is worth

Laced roundels which may be origin of complex octagon

looking at the two versions of the border to understand, in terms of *structure*, why the doubled version is so much stronger. At first sight, it seems simply as though the upper one contains twice as many squares as the lower one. However, when we look carefully, we see that this "doubling" creates several entirely new systems of centers, which overlap. There are large diamonds, made of four triangles, large rectangles (Union Jack-like) made of eight triangles, there are Holbein-like motifs formed by four of the black hooks within one of the diamonds, there are hourglass shapes made of four triangles meeting in a point. The existence of these new centers was obvious to the weaver, as we can see, because they have been marked and emphasized, by the use of tiny white diamonds, at crucial points. This detail is missing from the narrower borders that do not contain the complex structure. The diamonds themselves form an interesting array, which alternates between three and four, in vertical rows. The multi-colored four-pronged star, which also appears in the border (white on black in the diagram at top of page 313) is almost the same as a figure-ground

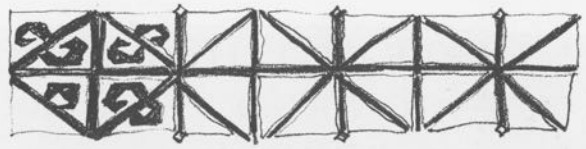


Knotted origin of octagon/wheel design

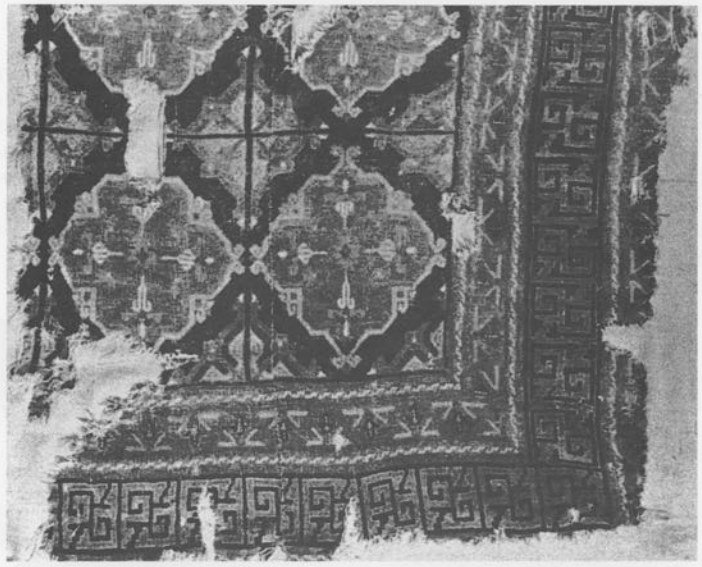
reversed version of the one which occurs in the CARPET WITH BLUE OCTAGON AND YELLOW BORDER.[194]

The narrower version of the border is also interesting, since it is evidently descended from the border type of the famous 15th century "Holbein" carpet from the Beyshehir mosque.[195] In the Beyshehir carpet there are, however, additional symmetries introduced by a few extra lines, which make that border far more powerful.

194 Page 315.
195 Erdmann, *History*, fig. 70.



Layout scheme of the large version border



Early Konya carpet with related border

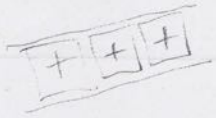
Comparable border motif from 15th century Beyshehir carpet

Border motif from this carpet

CARPET WITH BLUE OCTAGON AND YELLOW BORDER

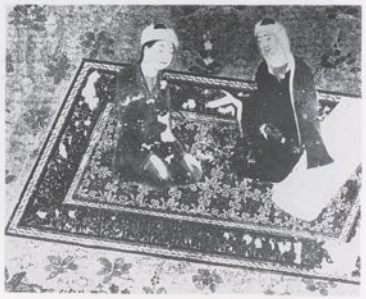
KONYA
153 cm x 216 cm

Like the CARPET WITH PURPLE AND WHITE OCTAGON, the central octagon of this carpet has origins in the octagonal endless knot designs of an earlier period.[196] The border is one of the most beautiful aspects of the carpet. If we concentrate on the *space* formed in the border, not only on the cross motif, we see that the border is made up of square modules, only slightly different from the square modules of the Timurid kufic borders—and in this fashion we also learn to see the border in its most beautiful way. It is also interesting to compare this border, with the upper end main border of the CARPET WITH PURPLE AND WHITE OCTAGON. In spite of different appearance, the two are almost identical. Previously published.[197]



The border scheme understood as crosses in squares

Strongly related original Timurid border type



Timurid border of boxed crosses: Sadi's Gulistan, 1426

Format of one square

Drawing of the main border

196 See discussion on page 310.
197 In *Lefevre*, 4 February 1977, Lot 16. The border of this carpet is illustrated and discussed in Bruggemann and Bohmer, *Teppiche der Bauern*, p. 62.

BLUE ANIMAL SKIN CARPET

KONYA
144 cm x 203 cm

A small group of carpets in the Turk ve Islam Museum are believed to originate, in their design, from the two-dimensional pattern of a flayed animal skin. These carpets mostly have a white field. The present carpet, with its shining and brilliant blue field, is an early version of a second less interesting type, which emanates from the other.

Animal pelt prayer rug, Turk ve Islam Museum

One of the nicest things about this carpet is its color. Most carpets benefit from light—in sunlight, or under a brilliant lamp, their own colors shine more vividly. This carpet does not especially benefit from having a light shine on it—because it seems to produce its own light. Even in a darkened room, the pale blue of the central field seems to shine out, in almost mythi-

cal fashion, giving off light of its own. I believe this happens simply because the skill of the weaver, in combining the intense light blue with the vivid white outlining and the rather dark red of the background, has created something which gathers light from surrounding sources and intensifies it for the eye.[198]

TRANSYLVANIAN PRAYER CARPET WITH COUPLED COLUMNS

ANATOLIA
131 cm x 184 cm

The format of the multiple niche prayer arch may be far more ancient than recent writings seem to suggest. It appears in the 10th century Leon Bible shown below. And on eight pages in the 8-9th century Book of Kells, we also find a three arch arrangement, quite similar

Illumination from Leon Bible of 920 with multi-column layout

A similar illumination from the Book of Kells, 8-9th century

198 The original white field carpets are shown for example, in Erdmann, *Seven Hundred Years*, fig. 116; The Sumerbank, *Samples of the Old Turkish Carpets and Kilims*, Istanbul, 1961, Pl. 14; and Aslanapa, *Turkish Arts*, p. 68, fig. 6. The later group illustrated for example, in Ferdi Besim and Fritz Langauer, *Turkische Teppiche*, Vienna, 1979; and *Hali*, Vol. 2, No. 1, 1979, advertisement p. 25.

199 Illustrated in Henry, *Book of Kells*, pp. 2-9.

in feeling to the arrangement of the prayer arch of this carpet.[199] In all these cases, there are four columns — with lines that could, in a later drawing have turned into four paired columns, as in this carpet.

It is fascinating that in the arches above the niche of these pages from the Book of Kells, there are in one case cartouches similar to those of early Turkish carpets (page 6); in another, an endless array of three dots, comparable to the so-called Chintamani design (page 7); and on all eight pages there are examples of the endless braid we now call a kufic border.

It is hard to say whether the Turkish motifs

came from Northern Europe, or whether the Book of Kells was illustrated by artists who came from the Islamic world — though in my opinion it is more likely that the motifs went from Ireland to Anatolia. What is certain in any case, is that these motifs are extremely ancient.

SCARLET NICHED TRANSYLVANIAN PRAYER RUG

SOUTH WESTERN ANATOLIA
124 cm x 175 cm

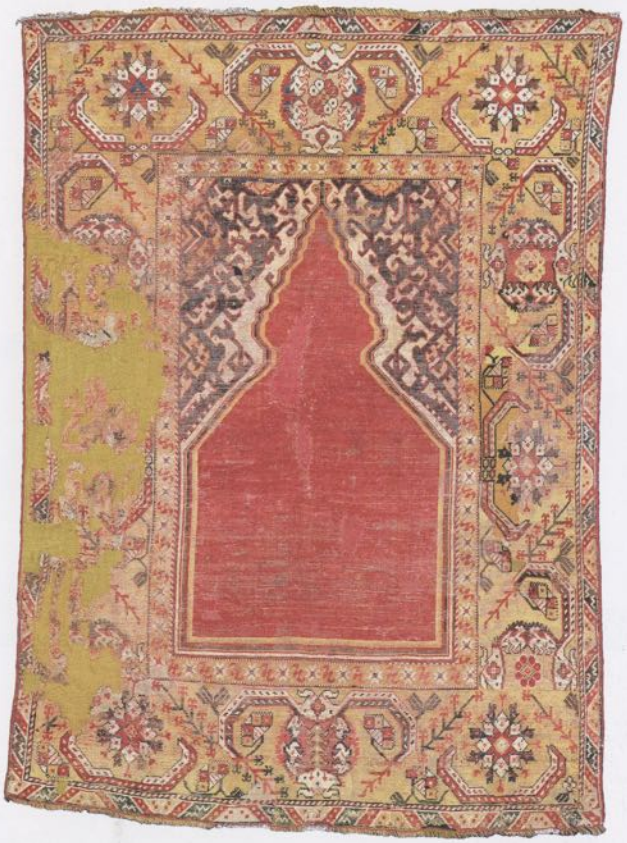
This carpet, although heavily damaged, is one of the more beautiful of the group of similar Transylvanian prayer rugs. The red mihrab, seen against the black and white tendrils of the spandrel, seems almost like the flame of a human spirit.

In quality of drawing, many other Transylvanian carpets are more precise, or more delicate — but late examples of this group have a danger of becoming almost boudoir-like in their decorative quality. This is true, for instance, of a beautiful carpet illustrated at one time in *Hali*.[200] The carpet shown here retains more of the feeling of cold pure spirit.

Similar carpet in Turk ve Islam Museum

Animal interlock in tracery in the spandrels

200 Sailer advertisement, *Hali*, Vol. 3, No. 2, 1980, p. 152.



The power to communicate the image of a spirit hinges especially on the structure of the vegetal tracery in the spandrels. At first sight this seems to be a random intertwining of black and white, with no rule beyond the fact that there are approximately equal areas of the two colors, densely interlaced. However, when we examine it carefully, we see that it possesses a very orderly internal symmetry structure. It is this structure which creates its magnetic power.

Previously published.[201]

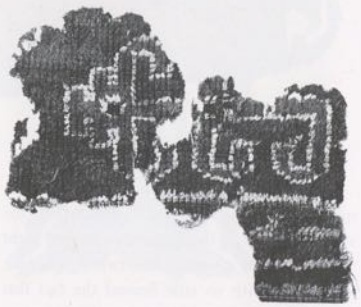
201 *Lefevre*, 27th April 1979, Lot 23. A carpet with very similar feeling and similar drawing remains in the Turk ve Islam Museum, and is attributed to the 16th century. Illustrated in Sumerbank, *Samples*, Pl. 10.

GREEN FIELD "MONGOLIAN" VILLAGE CARPET

ANATOLIA
162 cm x 367 cm (complete)

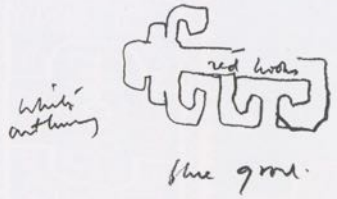
Chinese scroll painting showing Ming carpet, 13th century

This carpet is a most unusual Anatolian carpet, reminiscent of the Mongolian or Chinese carpet illustrated in a 13th century Chinese scroll painting in the National Palace Museum, Taipei.[202] It is unique in design, and almost without connection to other Anatolian traditions. With its small animal devices in the upper border and in the central diamond, and in the tendrils which fill the cartouches in the borders, it appears to be related to village traditions where early animal and Seljuk forms survived. The same drawing of the tendrils in the cartouches also appears in a Fostat fragment, dated 15-16th century, that is part of the Keir collection.[203] Previously published.[203a]

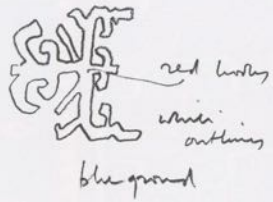


15th century Fostat fragment, same design, same coloring

202 See Dimand and Mailey, *Metropolitan Museum*, p. 22.
203 Spuhler, *Keir Collection*, p. 31, No. 3.
203a Bausback, *Anatolisch*, p. 31.



Fostat showing red hooks, blue ground, white outlining

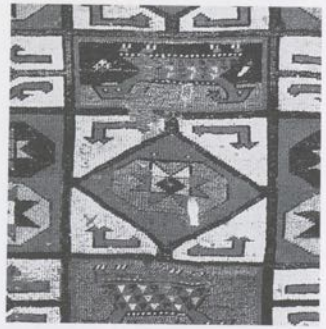


This carpet, also red hooks, blue ground, white outlining

The central medallion of the carpet is similar to the 13th century carpet which appears in the scroll painting illustrated above. The cartouches and diamonds in the border are so immense, so dominant, and so strong in their form, that it seems to me almost impossible to imagine that they could be derived from the Transylvanian carpets, as Bausback suggests.[204] On the contrary, I believe this must certainly be a more primitive form than the Transylvanian cartouche. The boldness of the drawing, and the geometric structure which it provides, seem to me, to be far more ancient and impressive in their local symmetries, than the more boudoir-like quality of the Transylvanian cartouches, with their floral realism.

The small animal-like figures, are almost the same as those which occur in the 15th century LARGE OCTAGON CARPET of this collection. In overall feel, there is also a slight similarity between this carpet, and the Berlin animal carpet.[205] It is hard to be specific about this similarity, but there is some comparable quality or feel about the two, which would place them together. Slightly similar figures also appear in a village carpet in the Turk ve Islam.[206] The full carpet is shown uncropped on page 60. Previously published.[207]

Central medallion of 13th century Chinese carpet



Berlin animal carpet, with similar diamond forms

204 Bausback, *Anatolische*, p. 30.
205 Illustrated in Bruggeman and Bohmer, *Teppiche der Bauern*, Pl. 56.
206 Yetkin, *Turk Hali*, Pl. 40, dated to the 16th century.
207 Bausback, *Anatolische Teppichkunst*, p. 31.

ENDLESS DESIGN WITH STARLIKE MEDALLIONS

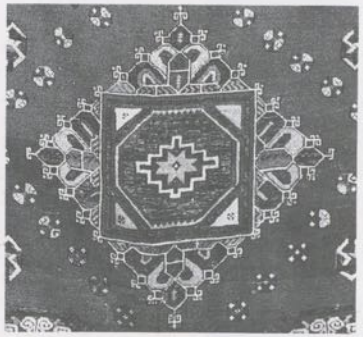
BERGAMA
70 cm x 123 cm

This fragment presents yet another glimpse of a type of carpet, presumably known in earlier centuries, of which no existing example remains to us. But the star configuration which appears in this carpet is itself rather well known. It forms the main medallion of the 17th-18th century

Holbein variant carpets in the McMullan collection,[208] and of many other examples of that type.

As always, the endless design must almost certainly have preceded the centralized version. Two earlier carpets—the Pohlmann carpet[209] and another similar carpet in Berlin[210]—are known, which seem halfway between the endless design and the centralized design. However, even these two carpets, though they indicate the possibility of a still earlier endless repeat version, are themselves still concentric medallion versions.

The endless repeat design is important for two reasons. First, the centers produced *between* the medallions make the unification of the space more intense, and so make the design itself more significant. Second, there seems to be some possibility that this carpet represents a link between Turkoman and Turkish carpets. In physical texture and appearance, this endless "gul" design does have the feel of a Turkoman carpet, especially in its colors—the heavy purplish red-brown field, and in the blue, red and white guls. It would be very interesting to find out if these Turkish designs originated among Turkoman tribes. Previously published.[210a]



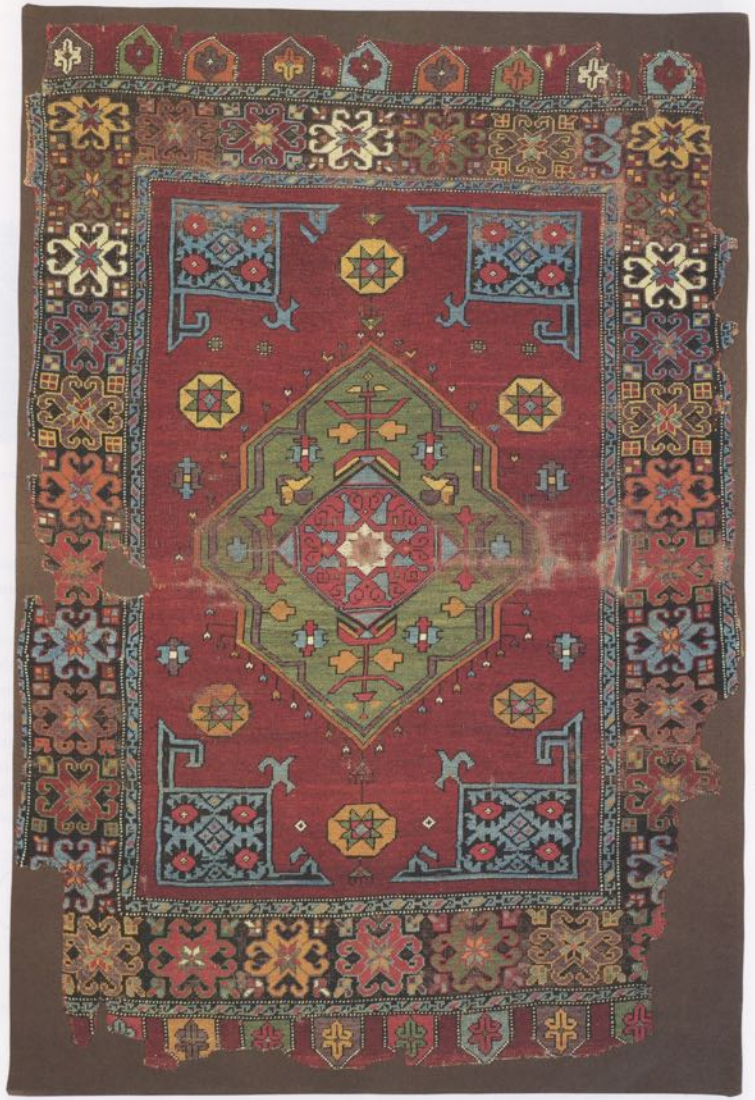
Single medallion from small pattern Holbein

Another single medallion

GREEN MEDALLION CARPET

CENTRAL ANATOLIA
152 cm x 221 cm

208 McMullan, *Islamic Carpets*, Pls. 96 and 97.
209 Published in Bode and Kuhnel, *Antique Rugs*, fig. 12, and in Erdmann, *Der Orientalische*, fig. 39.
210 Published in Kurt Erdmann, *Europa und der Orientteppich*, Mainz, 1962, fig. 13.
210a *Hali*, Issue 56, April 1991, p. 123.



LARGE CARPET WITH RAM'S HORN FIGURES

KONYA
161 cm x 314 cm (complete)

This Konya carpet is a fine example of a limited design type in which the ram's horn motif is repeated endlessly in both field and border. Two other comparable carpets have been published, one from the Hubel collection,[211] the other sold at Lefevre's galleries.[212]

The ram's horn border is relatively common in the so-called Transylvanian prayer rugs.[213] It is generally believed to be a village schematic version of the more accurately drawn floral border visible, for instance, in the 16th century Ottoman prayer carpet in the Textile Museum[214] that is illustrated here, where one sees the same general arrangement, but more realistically drawn in curvilinear style.

Degenerate realistic floral version in Ottoman prayer carpet

Terracotta ram's horn sculpture, Hittite civilization

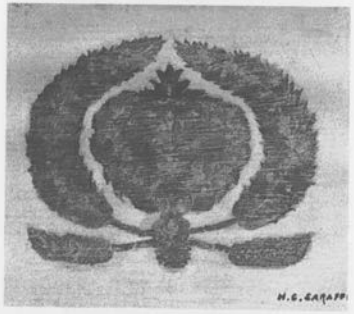
I believe that here again, there is confusion about the relative date of the floral style and the geometric style. The ram's horn motif is extremely ancient. It exists in Hittite remains from long before the time of Christ—and also occurs on a wide variety of other motifs from the first millennium AD, including artifacts from all over Europe and the Middle East, and including the work of Seljuk artists. If we compare the ram's horn device from these earlier examples with the floral Ottoman device, and

Ram's horn motif in abstract form approaching carpet design

211 Hubel, 1964, Pl. 20.
212 *Lefevre*, 27 April 1979, Lot 25, also published in Bausback, *Anatolische*, p. 89.
213 For instance SCARLET NICHED PRAYER RUG, this collection page 321.
214 See Ettinghausen, *Prayer Rugs*, Pl. 1.

ask which of the two has the more essential and more complex structure of internal symmetries, we find that the "primitive" version is, in its *structure* — not in its detailed drawing — much more complex and more unified than the Ottoman example. Using the principle that symmetry structures degenerate more easily than they can be built up, it is plausible to assume that the designers of the Ottoman court *found* the ram's horn motif in use in Anatolia, and then proceeded to re-use it in a floral version which gained realism and detail, *but which actually lost unity and depth of structure*. According to this view, we are then looking at a carpet with a more primitive device, which is not only older, but more significant artistically than the floral realism of the Ottoman border.

14th century kaftan



Pomegranate and serrated leaves from 14th century kaftan

The Artuklu tile, 12th century, Diyarbakir fortress

The overall structure of this carpet does not occur in either of the other two carpets bearing this device in the border — namely, the powerful arrangement of these ram's horn devices in the field as well. Examples of carpets which have an infinite repeat of the same motif in both field and border, are relatively rare.[215]

In order to search for the true origin of the "ram's horn" device, let us begin with the Artuklu tile.[216] This tile from the fortress of Diyarbakir probably dates from the 12th century and contains the ram's horn device clearly

215 Two Ushaks, with the 16th century border filling the field are examples, one in the Ballard collection, see Ettinghausen, *Prayer Rugs*, Pl. X, the other in McMullan, *Islamic Carpets*, Pl. 79.
216 Illustrated in Aslanapa, *Turkish Arts*, Pl. Ib, p. 109.

and explicitly below the pair of eagles. The tile is typical of the paired birds that we see on paintings of medieval carpets, which have been extensively discussed, for instance by Erdmann. In all of these carpets we can see the same local axis of symmetry, and the origin of the same distribution of symmetry that is typical of the ram's horn device: that is, a symmetrical center, flanked on two sides by a spiral symmetry, forming the whole having a directional axis.

This is clearly visible in the 14th and 15th century paintings illustrated in Erdmann.[217] This connection is further borne out by the coloring — essentially red and yellow — the same colors typically used in early animal carpets.

The same theme occurs in early Ottoman textiles, most commonly 14th and 15th century, in the form of a pineapple or pomegranate, with a pair of lancet leaves,[218] all of which would seem to predate the motif that appears in the Textile Museum prayer rug. In another form it appears in designs from Eastern Turkestan.[219]

Ram's horn figures on Hittite clay vessel, 2500 BC

217 Erdmann, *History*, figs. 16 and 17.
218 See for instance Oz, *Textiles*, Pls. 1, 2.
219 See for instance, the drawings in Bidder, *Carpets*, p. 67.

PURPLISH RED CARPET WITH BLACK, WHITE AND YELLOW SHIELDS

AKSARAY OR KIRSHEHIR
95 cm x 117 cm

This fragment is one of the more obscure pieces in the collection. Composed of shields arranged on a diamond lattice, it has a number of unusual features. It has no borders at all — and the selvedge seems original. I suspect it is 17th century, but it is hard to tell since almost every knot of the original has gone, and has been replaced by two or three new generations of knots. The knots are very fine. It has pale yellowish-green wefts. In the few remaining original knots, it has a purplish-red dye, which appears to be lac, but may also have been something like the fabled Tyrian purple. The yellow motifs, are tinged with pale green.

Drop repeat pattern carpet from Turk ve Islam

The design is a repeat design, but very freely executed, with variation in each drawing of the main motif. I wonder if the arrangement of "cat" or shield shapes on the diamond lattice, may derive from the Seljuk carved stone ornaments of the 13th century. The structure of the design is given essentially by the diamond lattice underlying the design, by the "cat-like" character of the individual elements, and by the crosses which appear both within the catlike shields, and between them, thus establishing a centrally symmetric symmetry, within the directional symmetry of the cat-shields. In carpets, the nearest thing to this "cat-like" device appears in a carpet in the

Sivas, Gock Medresseh, southwest corner of Blind Tower

Turk ve Islam, but the Turk ve Islam carpet is of vastly earlier date.[220]

The space between the cat-like devices is in my opinion the most interesting thing about the carpet—and it is this which holds the design together.

WHITE FIELD CARPET WITH TRIDENT FIGURES

KONYA
84 cm x 201 cm

This 17th century carpet has brilliant and unusual colors, mainly purples and yellows, accentuated by the white field. Though primitive in appearance, it could be seen as a degenerate example of better known "tulip" types. However, I believe that what look like tulip forms are more likely to be archaic trident forms, which now look like degenerate tulips but are actually forms which produce centers in themselves.

The color is magnificent. Even though late, in this carpet the barbaric and splendid color still reaches something rarely seen. It is an original feeling, which has a true being nature in it. The basis of the idea which I have put forward in this book, is that some centers and groups of centers, go to the root of a mysterious and ancient center in ourselves. It is this barbaric "thing," this actual essence of our human nature which is reached, plumbed, pierced when a carpet is made correctly. The trident forms, and the simple zigzag along the diamond field shapes, are primitive, unsophisticated. But still, the shape comes from "original shape"—and still has "original force."

Power of the forms whose space creates the beauty of color

Shape and positive character of yellow background space

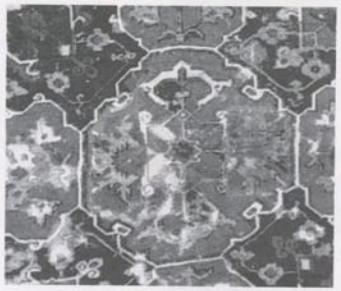
220 Published in Sumerbank, *Samples*, Pl. 23.

It is significant above all, that even the space around the figures in the field, is itself strongly shaped and positive. For example, the yellow field in the upper field has the shape of the great blossom — even though it is "only background." It is this quality of positiveness in space, which makes the colors shine.

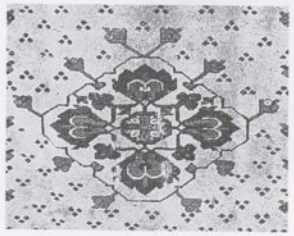
RED CARPET WITH GREEN OCTAGON

ANATOLIA
119 cm x 166 cm

This carpet, originally published by Jacoby as a Caucasian carpet, is, in my opinion, almost certainly Turkish — even though it does have cotton warps.[221]



The key motif



The same motif in a 15-16th century white ground carpet

Early variant of star Ushak

221 Previously published by Jacoby, *Eine Sammlung*, Pl. 20.

The central motif which occurs three times, in the octagon and above it and below it, is almost exactly the same as the key motif which appears in the octagons of an important group of archaic pre-classical Ushaks to which it is evidently related.[222] While the Ushak type exists in several versions, this piece, is later than they are, and as far as I know, unique. The border motifs of the carpet, are strongly related to the border forms in the CARPET WITH BLUE LOTUS BLOSSOMS ON GREEN FIELD[223] and to those in the Pohlmann carpet in Berlin. They are also similar to many of the field motifs which appear in the older Ushak type.

222 The particular example illustrated on this page appears in McMullan, *Islamic Carpets*, Pl. 68.
223 Page 297.

LAMP CARPET WITH REPEATING HEXAGONS

ANATOLIA
123 cm x 88 cm

Related 14th century Seljuk carpet in Turk ve Islam Museum

A small fragment of uncommon design. The coloring is subtle and beautiful. The design creates beautiful positive space, by repeating stripes that contain hexagon lamp forms, with stripes of repeating triangles between. The importance of positive space, and its vitality when used properly, is very interesting. The only similar carpet known to me, is a Seljuk carpet fragment in the Turk ve Islam Museum, which appears, from the more intense drawing, and more interlocked detail, to be rather older.[224]

224 Illustrated in Aslanapa, *Turkish Arts*, no date, plate XV.

PART FOUR

THE DEGENERATION OF THE ART

THE START OF THE TRADITION

ENDLESS KNOT DESIGN HISPANO-MORESQUE CARPET
SPANISH CARPET OF THE 12TH CENTURY

The tradition is intact

To close the book, I shall now give a short summary of the way the traditional art of carpet weaving finally evaporated. On the right I show a single early 19th century Bergama CARPET WITH EIGHT PANELS AND RED INTERLACE, from my own collection. I have chosen this carpet because it is, by normal collecting standards, a "good" 19th century Turkish carpet. But I want to look at this 19th century carpet in the context of the carpet on the left, the 12th century ENDLESS KNOT DESIGN HISPANO-MORESQUE CARPET, what I believe to be the earliest carpet of my collection.

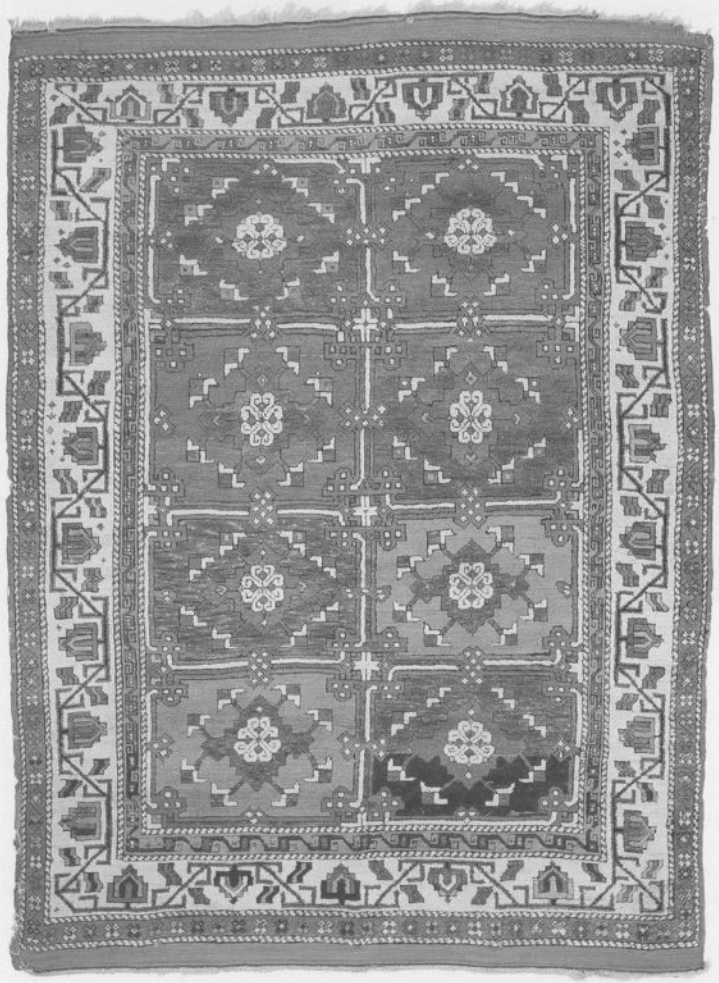
I have chosen the Bergama because in its endless interlace design it is clearly related—at least in motif—with the HISPANO MORESQUE CARPET. Its design, in this sense, also falls within the great tradition of Turkish and Islamic design. But the Bergama carpet, although commercially desirable, *is in my opinion essentially worthless as a work of art*. In this carpet the great tradition of Anatolian art has essentially reached a dead end. It has monetary value. But as far as artistic worth is concerned, it lacks the deep structure of the great Turkish carpets entirely.

By analyzing this fact in detail, in the next few pages, and by drawing attention to the lack of structure in this carpet, I hope to underline, and explain, what it is in structure that the great Turkish carpets really have. The Bergama carpet is interesting to study, precisely because by purely intellectual standards, it *ought* to be interesting. In trying to understand why it is not, we shall get, I hope, a final concrete insight into the true nature of the field of centers, and the true nature of great carpet art.

Let me explain first why, in theory, the Bergama carpet *ought* to be interesting. The design is undoubtedly related to very early designs.

THE END OF THE TRADITION

CARPET WITH EIGHT PANELS AND RED INTERLACE
BERGAMA CARPET OF THE 19TH CENTURY



At this stage the tradition has virtually evaporated

In Yetkin's discussion of an almost identical piece in the Turk ve Islam Museum she shows that it is related to a type of carpet which appears in a 15th century Herat painting.[1] The format is the same: Square panels; knots at the corners and mid-points of the panels; a secondary diagonal grid created by the knots, overlaying the main grid.

15th century Herat painting with interlace design carpet

Turk ve Islam version of this carpet

And, further, this particular Bergama carpet is one of the *good* examples of its type. With the exception of the Turk ve Islam Museum carpet, most of the others which exist are even later: the knot designs are degenerate, the triangular leaf forms no longer form a diagonal grid as they do here, and so on. But in this particular example the drawing is still excellent. The color is good. The idea of the carpet is intact.

What then is wrong with it. Why is it the "tail-end" of the tradition, and not a late, but living survivor. The answer is simple. In a word, the carpet has no spirit in it. The empty formal scheme is there. But the spirit is no longer there. Not in the color. Not in the geometry.

Throughout this book I have tried to show that spirit in a carpet is a tangible quality which can be analyzed. And now, by studying the centers which exist in this particular carpet, we can see exactly *how* and *why* the spirit has gone out of it. It is for this reason, above all, to emphasize the real importance of the field of centers once again — *in this case by its absence — that I have kept this Bergama* CARPET WITH EIGHT PANELS AND RED INTERLACE in the collection.

I shall now try to point precisely at what is missing from the structure of the carpet. Let us examine five different centers which appear in its design. These five centers are shown below, on the right-hand side of each paired comparison. To the left of each one I have drawn a comparable center from a much earlier carpet which shows clearly how a comparable center is made profound in a carpet when the carpet *does* come from the spirit, and does have spirit in it. In each case we shall see that each of the centers in the Bergama carpet, though nominally a center — is actually a weak element, with too little structure to be a center in any significant sense. Consider these cases one by one.

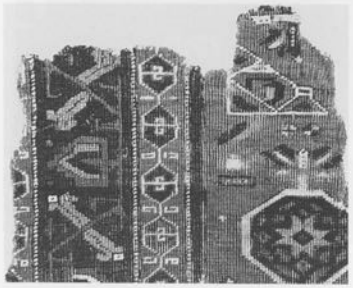
1 Illustrated Yetkin, *Turk Hali*, English edition, Pl. 30, and discussion which precedes on pgs. 52-55.

COMPARISON #1
MAJOR BORDERS

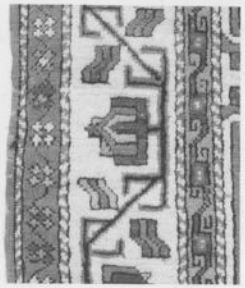
Compare the main border motif in the GHIRLANDAIO CARPET[2] with the main border motif of the CARPET WITH EIGHT PANELS AND RED INTERLACE. At first inspection the Bergama version looks more interesting. It has bright colors, and a kind of lively feel. But if we examine the space carefully, we see something else. The Ghirlandaio version has two tulip forms making the diagonal. In the Bergama version, these are replaced with two pairs of wavy lines. The tulips form a more definite center than the wavy lines. Also the tulips work together to form a larger center in the *pair* of tulips. The wavy lines in the Bergama form no such second larger center.

Also the space between the motifs is positive in the Ghirlandaio case. For example, the two-tulip motif is enclosed in a piece of space which is square, well-formed, and definite. I can relate myself to that square. If I look at the counterpart on the white border, there is no such "virtual" square enclosing the two wavy line motifs. They just hang there loosely in the space.

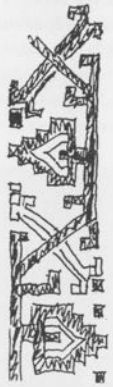
In the Ghirlandaio version, we have a definite structure of centers. In the Bergama version we have a number of motifs loosely arranged to form a design, but not really forming the densely packed space which forms deep or powerful centers. In the two sketches shown at the bottom right of this page, the difference is clearly visible.



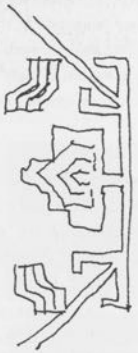
1A. Main border of the Ghirlandaio carpet



1B. Main border of this Bergama carpet



Endless structure placed to produce hundreds of centers



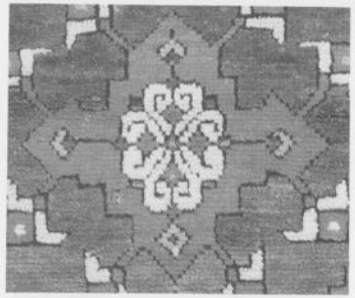
Loose array of design elements, scattered in the space

2 Page 181.

COMPARISON #2
FOUR-ARMED FIGURES

Compare the four-armed motif of the BYZANTINE-TIMURID PROTOTYPE[1] with the four-armed motif in the middle of each panel of this Bergama carpet. In the Byzantine case, the thing has strength, depth, power. I feel it is connected to me, I feel it affects me in my bones. This happens because every tiny portion is a center: the four diamonds in the middle, the radiating star, the well-formed space inside the latch-hooks at the tail of each "spade," the two rhombs that form wings to the arrowhead motif, the diamond that forms the point of the arrow. In the Bergama case the number of centers is utterly impoverished. There is a vaguely formed inward pointing arrow, a small token of an arrow at the end of each arm, there is a dot in the middle of the whole thing — not much more. And even these centers are weak and poorly-formed. The white arrowheads are so weak, I cannot relate myself to them, or see my own self embodied in them. They don't even have two well-formed tails — there is almost nothing there.

2A. Four arrowhead center from the Byzantine-Timurid carpet

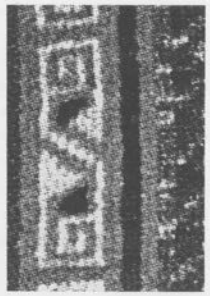


2B. Four-armed figure from panel of this Bergama carpet

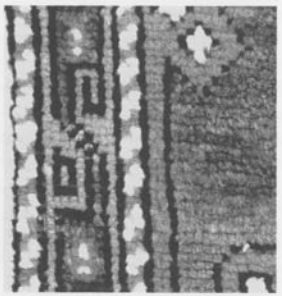
COMPARISON #3
MINOR BORDERS

Compare the minor border of the Marby carpet with the minor border of this Bergama carpet. The minor border of the Bergama is a typical early 19th century border, reminiscent of much earlier borders. However when we compare it with a similar border in the Marby carpet, we see that it is really quite different in content. The Marby border has a very dense packing of centers, at many levels. The whole design revolves about the dark triangles which together (in pairs) form a rectangle that is a center. The spiral hook is drawn so that both dark and light, equally, form centers. The dark triangle is drawn so that the white triangle next to it also becomes a center. That white triangle "points" towards the other half of the motif, thus forming a unifying loop that makes a center of the whole. The dark bar between adjacent motifs, forms a symmetrical figure with two white triangle "tails," so that in the midst of the asymmetry there is suddenly a symmetrical and powerful center which contrasts with the others and enriches them. In the 19th century Bergama version, these centers have all but disappeared. The S's and hooks still make something interesting. But by comparison with the earlier drawing, they are muddy and ill-defined as if the weaver just did not know what he(she) was doing. And that is precisely, and literally the case.

3 Page 133.



3A. Minor border of the Marby carpet

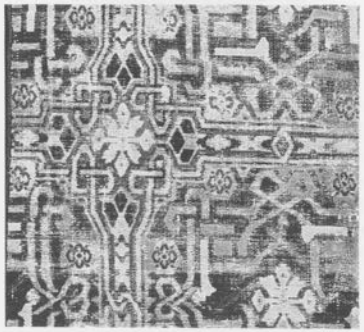


3B. Minor border on this Bergama carpet

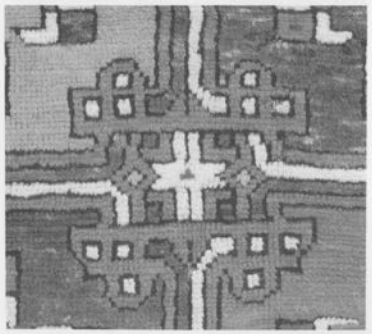
The weaver no longer knew about all these centers, and no longer cared about them — so they are not there. The weaver no longer tried to put his eternal spirit in the shapes. It is an empty drawing, not intended to be a picture of the person's vision of the eternal spirit. And, to the slight extent that the centers are still there, anyway they no longer *feel* like centers. They have lost their force, collectively and individually.

All this, just in the comparison of the two minor borders.

COMPARISON #4
LARGE KNOT



4A. Drawing of knot in the Hispano-Moresque carpet



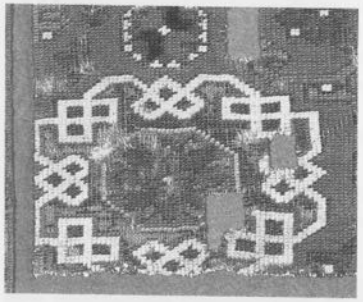
4B. Drawing of knot in this Bergama carpet

Compare the great knot of the ENDLESS KNOT DESIGN HISPANO MORESQUE CARPET with the central knot design of this Bergama carpet.

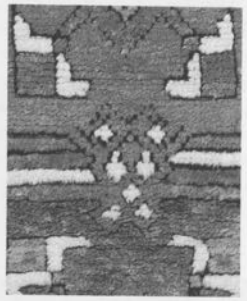
The Bergama design is made of knot-figures. That is about all one can say. In the Spanish case, there are innumerable centers, subtly present, which come swimming in to view, and disappear again, as one contemplates the design. It is extremely subtle, and by its quietness, profound. The Bergama version is nothing but raw materials. The Spanish version, seven hundred years earlier in date, is a great work, comparable, even though so tiny, to the works of unknown masters of painting from the 12th century, or to the works of Cimabue or Giotto from a century later.

COMPARISON #5
SMALL KNOT

Compare the knot design of a SMALL PATTERN HOLBEIN with the small mid-panel knots of the Bergama carpet. Again, but even more dramatically, we see how the so-called knot in the Bergama is hardly more than a barely recognizable mush of red and white wool — the red vaguely surrounds the white, forming loops of some kind — but there is no sharpness in the drawing, no definite forms, no clear center as a whole, no clear minor centers, not even clear centers in the individual loops.



5A. Small knot figures in a small pattern Holbein carpet



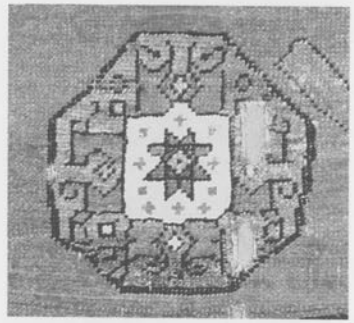
5B. Mid-panel knot figure in this Bergama carpet

On the SMALL PATTERN HOLBEIN, even the corner loops, with their difficult triangular condition, and the spaces between the loops and knots, are carefully and accurately drawn so that each tiny part makes a definite impression. It is worth mentioning not only that the shapes are more complex, and more carefully drawn. They tend to have definite shapes, not rounded mushy shapes. The octagon at the center is sharply drawn. The star inside this octagon is sharply drawn. The "holes" in the knots are squares and diamond shapes. In the Bergama version all this clarity has gone away. The shapes are rounded and amorphous. As a result, no one center, forms a precise center next to it — because next to a mushy line, there is always another mushy line — and the centers, closely packed and dense, are impossible to achieve.

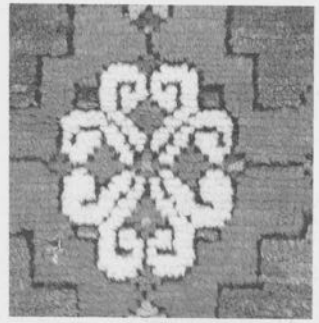
COMPARISON #6
INDENTED OCTAGONS

Compare the octagon in the early WAVING BORDER CARPET[4] with the rosette at the center of the panel in the Bergama carpet. Each one is a kind of endless rosette motif: but the wheel design octagon has beauty of structure, is articulate, and carefully drawn, with dozens of centers pointing inward, like the rosettes and octagons of any comparable large pattern Holbein from the 15th century. Even one tiny detail of the waving border octagon — one of the arrowhead figures that points inward towards the middle — fairly typical for 15th century carpets, has an immense number of small centers, overlapping, pressing against each other — so densely packed, that even this tiny part is literally "filled" with centers. As a result, we can identify with it. The geometry reflects my spirit, because like me it is full of centers and made of centers.

The 19th century Bergama rosette is pretty, but is only a loose arrangement of color without any detailed structure that can hold us in the centers that are formed.



6A. Octagon in the Waving border carpet



6B. Octagon rosette in this Bergama carpet

I do not wish to leave the impression that the difference of drawing between the good one and the degenerate one in each case, is merely a matter of accuracy, or formal or technical purity.

It is something far more drastic. In each case, the older left-hand example is a thing which has the force or structure to reflect the human spirit, to be a mirror of the self. In each case the right hand example *does not* have that force or structure.

Thus, the lack of spirit, the fact that the weaver was not concentrating on the task of forming a picture of the human spirit in each detail of the carpet, is not just some general and diffuse failure of art which one experiences as lack of spirit throughout the carpet.

It is a thing which is specifically wrong *geometrically* with every single figure drawn in the carpet. In each of these cases there is nothing in

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the carpet which reflects the human spirit, because not one of the centers there was powerfully enough made, or carefully enough made. The necessary geometric structure just is not there. And most of all, the intent is not there. The weaver did not have the intent, in any of the individual centers, to create the human spirit. And *therefore*, of course, it is not there.

That is the final dissolution of the art.

CONCLUSION

When we survey the carpets which have been presented in this book, one thing stands out clearly: the oldest are the best.

It is the earliest, most ancient ones, those which lie more towards the beginning of this collection, that show us the greatest examples of integrated wholeness, full of power wonderfully and harmoniously created in their interior, by complex overlapping symmetries, and multiplicity of overlapping centers.

This is most evident in the carpets from the 12th through 15th centuries, which derive directly from Seljuk, Timurid, Byzantine, Spanish and Mongolian predecessors.

In the 16th century, with the complexity of Ottoman art, some of the same character still exists. But now the complexity occurs sometimes in a form which is less primitive, and occasionally too sweet or pretty to have quite the same depth. The real spirit begins to disappear.

In the 17th century, we face a definite loss of structure. The carpet designs are simply less powerfully knit, the multiplicity of overlapping centers is less rich, the unity achieved is weaker and beginning to be degenerate.

By the 18th century, the degeneracy is almost complete. In some cases the interlocking centers hardly exist at all — and in any case, the subtle and primitive ways in which multiple centers support each other to produce unity, has almost disappeared entirely.

By the early 19th century, shown in this book only in the last Bergama, there is nothing left at all — except for the motifs — which lie, unconnected, fragmented, among pretty colors, and nice wool. The carpets of the 19th century are almost exclusively decorative — the powerful unity and spiritual feeling produced in the earlier eras, has disappeared.

All this is fairly obvious, simply from the examples in this book. What are we to conclude. Should it be understood as a romantic lament, on the passing of lost eras? Are these the observations of someone who cannot live in the present, but is eternally lamenting the beauties of the lost past.

I do not think so. I am myself an artist and a builder. I have studied the carpets presented in this book, for years, exactly because I learn so much from them, and because I believe that the lessons they have to teach are vital, for any proper understanding of space. I view these lessons, not as romantic and impassioned memories of bygone eras, but as essential lessons for the present, for our active creation of structure, for the making of things in our own time, and in times to come.

It would be completely frivolous to deny the greater quality of the earliest carpets, merely in order to give way to some kind of sentimental appreciation of 19th and early 20th century carpets, just because these carpets happen still to be available.

Sometimes, from novices, one hears the solecism that, in a few hundred years the carpets of the 20th century will be great antiques — "the colors will have mellowed — and they will be collected and prized."

This is sheer nonsense. The carpets of the 20th century — and to a large extent those of the 19th — have no serious structure in them. They

Exhibition gallery for the Christopher Alexander collection

ON THIS PAGE IS A PHOTOGAPH OF THE CARPET GALLERY IN THE SAN FRANCISCO M. H. DE YOUNG MUSEUM EXHIBIT NOVEMBER 1990 TO FEBRUARY 1991. THE GALERY SPACE WHICH I DESIGNED FOR THE CARPETS, WAS ALMOST LIKE A MUSEUM WITHIN A MUSEUM. THE ATMOSPHERE WAS DARK, ALMOST SMOKY — IN SUCH A WAY THAT THE CARPETS GLOWED, AND SHONE OUT FROM THE DARKNESS REVEALING — IN MANY CASES — THEIR DEEP FEELING.
MANY PEOPLE SAID THAT THEY HAD NEVER HAD SUCH AN EXPERIENCE OF CARPETS, AND SAW, FOR THE FIRST TIME, THE TRUE FEELING WHICH THEY CONTAINED.
I VIEW THE TEMPORARY EXHIBIT BUILT AT THAT TIME, AS A SKETCH MODEL OF A MUSEUM WHICH I HOPE TO BUILD, ONE DAY, IN WHICH THESE CARPETS WILL BE PERMANENTLY HOUSED.

are not great art — and cannot become so with age. They are simply not made with the same intention that the earlier carpets were made with — and do not have, nor can they ever have, the same presence or power.

The great carpets were made with the intention to create portions of space, in which unity — oneness — occurs. It was known to the weavers of those times, that this deep and serious unity, could only be created by the creation of multiple centers, in which each center became a "being" supported, elaborated, strengthened by other centers, in its neighborhood, which are themselves formed, and supported in the same way by yet other centers, all of which were themselves "beings" in the same way that the whole is also a being.

The same depth, the same spirituality, can only be accomplished by us, when we ourselves, set out to do the same. If there is ever to be another great era of carpet weaving, as there well might be, it will only come about when 19th and 20th century commercially motivated art has given way, once again, to a period in which artists intentionally set out to produce structures which are pictures of the human soul — and when the artists have the knowledge and the seriousness of intention to accomplish this.

The same is true of buildings.

Buildings, like carpets, are multi-centered structures which achieve unity, through the interlocking of multiple centers, each one reinforcing the others, until they become beings — just as it happens in carpets. In the great periods of building production, when Chartres, the Alhambra, the great Chinese palaces and Japanese temples were produced, the same process of creating unity from a multiplicity of centers was the underlying and predominant process that serious builders knew about, and followed.

Once it is understood that depth of structure arises from this multiplicity of centers in the way that I have tried to explain in this book, and once the artists, weavers, and builders commit themselves to this process again, then we shall be able to produce unity again, as surely as the masters of the 14th and 15th century did it in the great carpets of their era. But so far, those carpets still remain, today, the pinnacle of human achievement, in the creation of unity in space.

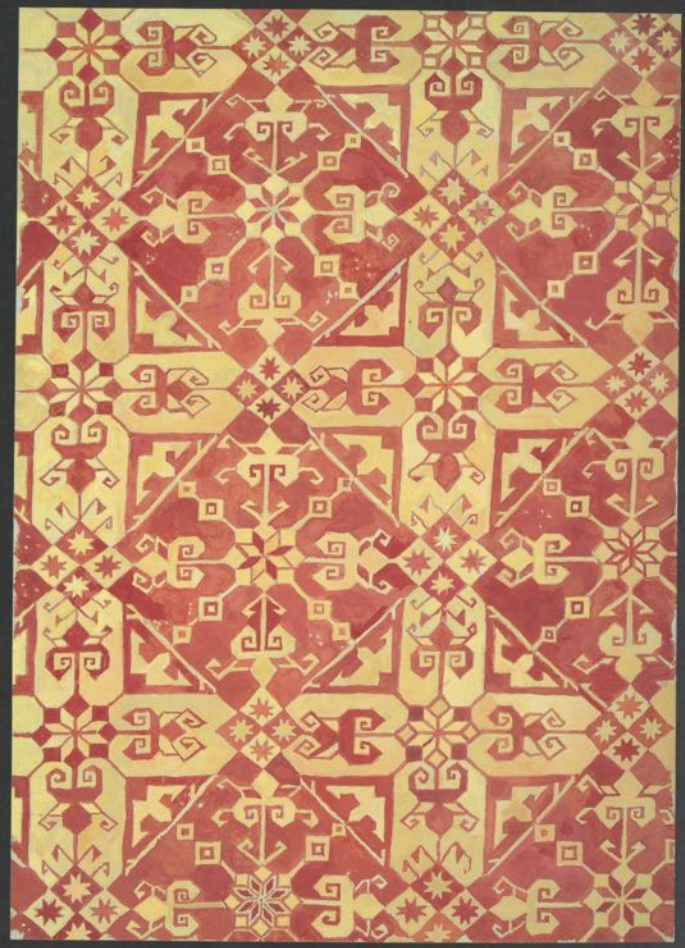
I myself have tried to move in this direction, in my own work as a builder. Years ago I began intentionally setting out to create these structures, and slowly, now, there is a growing appreciation of the buildings which I make. Occasionally people have begun to say that there is something there, something previously unattainable in 20th century art.

I believe the rebirth of understanding which must go with this, cannot be merely emotional or romantic, as it was a hundred years ago, when William Morris tried to do something similar. In his case, I believe, and in the case of the artists who surrounded him, there was a romantic appreciation of medieval art: but there was neither the understanding of the real structure present in the medieval works, nor was there the active spiritual force present, in these works — so that the structure could be made to live.

In our own time, I see something different. I see the beginnings of an attitude in which the structure may be understood, concretely, and with a tough mind — not only with an emotional heart. And I see the rebirth of an attitude about the world, perhaps based on new views of ethics, truth, ecology, which will give us a proper ground-stuff for the mental attitude from which these works can spring.

I do not believe that these works — the works of the 21st century — will resemble the Turkish carpets in any literal sense. But I believe some form of the same primitive force, the same knowledge of structure, and the same desire to make a work in which the work carries and illuminates the spirit — will be present.

I am almost certain, that in the 21st century, this ground-stuff will appear.



Gouache on photographic paper, 9⅛" x 13½", 1990

This painting started life as a reconstruction of a thirteenth century carpet. As I worked on it, it became a painting in its own right, related to my buildings. It embodies, what I have come more and more to think of, as a twenty-first century art; an art in which the ground of existence is recognized again, and in which the pure geometrical substance, described in this book, becomes the core.